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PERSONAL

Mr. W. E. Green has been appointed General Superintendent of the Kansas City, Pittsburg & Gulf R. R.

Mr. Thomas Martin has been appointed Superintendent of the Water-Works of West Springfield, Mass.

Mr. R. S. McKenna has been appointed Superintendent of the Dover Shops of the Delaware, Lackawanna & Western R. R.

Mr. Loring N. Farnum, civil engineer, has withdrawn from the C. H. Eglee Co. and opened an office at 53 State St., Boston, Mass.

Mr. Bion L. Burrows has been appointed Secretary of the Rapid Transit Commission of New York, to succeed Mr. Lewis L. Delafield.

Commodore M. S. Mayo, of Washington, D. C., on the retired list of the U. S. Navy, was married to Mrs. N. G. Hall, of Washington, on June 5.

Mr. J. T. Clark, General Traffic Manager of the Chicago, St. Paul, Minneapolis & Omaha R. R., has been elected Second Vice-President of that company.

Mr. Herman S. Hering, Associate Professor of Electrical Engineering at Johns Hopkins University, has resigned to devote himself to the cause of Christian Science.

Mr. R. J. Latta has been appointed Acting Chief Engineer of the Atlantic Coast Line, to succeed Col. Fleming Gardner, whose death was mentioned in our last issue.

Mr. Frederick S. Green resigned his position with John Monks & Son on June 1 to become Managing Engineer for Mr. William T. Ritch, contracting engineer, of New York city.

Mr. W. H. V. Rosing, Mechanical Engineer of the Illinois Central R. R., has been appointed Assistant Superintendent of Machinery, to succeed Mr. F. W. Brazier, who has resigned.

Mr. H. N. Sims, M. Am. Inst. M. E., has closed his office in Altoona, Pa., to become Manager of the mines of the Sun & Moon Mining & Milling Co., at Idaho Springs, Colorado.

Mr. R. Bruce Watson, of Watson & Hazelton, of Chicago, has been appointed by Governor Tanner as Architect of the State of Illinois. He is also County Architect for Cook county.

Mr. Fremont Crane, Engineer for the Sand Coulee Coal Co., of Sand Coulee, Mont., and of the Cottonwood Coal Co., of Stockett, Mont., was married on May 6 to Miss Grace Inez Nunn, of Sand Coulee, Mont.

Mr. Charles Rinehart has accepted a position in the engineering department of Tippett & Wood, of Phillipsburg, N. J. Mr. Rinehart has just graduated from Lafayette College, receiving the degree of civil engineer.

Mr. C. H. Topp, formerly City Engineer of Chatham, Ont., has been appointed City Engineer of Victoria, B. C. Mr. J. W. Shackelton has been appointed City Engineer of Chatham, Ont., to succeed Mr. C. H. Topp.

Mr. Chas. W. Reinhardt, Chief Draftsman of Engineering News, will sail on June 7 for a two months' trip to Southern Germany. Letters may be addressed to him in care of Engineering News, 1 Arundel St., Strand, London.

Mr. Thomas Fildes has resigned his position as Master Car Builder of the Chicago Division of the Lake Shore & Michigan Southern Ry., and has been appointed Assistant Superintendent of Motive Power of the Long Island R. R.

Mr. F. W. Brazier, Assistant Superintendent of Machinery on the Illinois Central R. R., has resigned to accept a similar position on the New York Central R. R., with the title of Assistant Superintendent of Rolling Stock.

Mr. C. C. Lewis, formerly with the Pennsylvania Steel Co., has been appointed Engineer of Maintenance of Way of the International Traction Co., the recently consolidated system of electric railways of Buffalo, N. Y., and vicinity.

Mr. John C. Sheehan, contractor, has withdrawn from the contracting firm of O'Brien, Sheehan & McBean, of New York, and has entered the firm of Wernberg & Co., of Pittsburg, Pa. The name of the new firm is Wernberg, Sheehan & Co.

Mr. A. D. Flinn has been appointed Principal Office Assistant to the Metropolitan Water Board of Massachusetts to succeed Mr. Reuben Sherrefs, M. Am. Soc. C. E., who has become the Chief Engineer of the Virginia Electrical Ry. & Development Co., of Richmond, Va.

Rear-Admiral George W. Melville, Engineer-in-Chief of the U. S. Navy, and President American Society of Mechanical Engineers, has had conferred upon him the honorary degree of Master of Science from Columbia University. He will also receive from Georgetown University, on June 22, the degree of Doctor of Laws, in recognition of his services in the Arctic regions.

Mr. Edward A. Hermann, M. Am. Soc. C. E., has been appointed Sewer Commissioner of St. Louis, Mo., to succeed Mr. B. H. Colby, M. Am. Soc. C. E., and Mr. Edward Flad, M. Am. Soc. C. E., has been appointed Water Commissioner, to succeed Mr. Minard L. Holman, M. Am. Soc. C. E. Mr. Hermann was Assistant Engineer of the Big Four Lines from 1882 to 1897, and is the author of "Steam Shovels and Steam Shovel Work," published by the Engineering News Publishing Co.

OBITUARY.

Mr. William Colgan, City Surveyor of Elizabeth, N. J., died at his home on May 30 from an attack of erysipelas.

Mr. Thomas F. Mason, President of the Quincy Copper Co., died at his home in New York city on June 3, aged 85 years.

Hon. Albert Peck, a large lumber and street railway investor, of Detroit, Mich., died from the results of a surgical operation on May 31.

Mr. James Netherwood, who built the Virginia Central R. R., now the Chesapeake & Ohio R. R., died at Richmond, Va., on May 28, aged 60 years.

Mr. Jacob Arnold, of the Indiana Contract Co., contractors for building locks and dams in the Ohio River, died from cancer of the stomach, on June 4, at Evansville, Ind.

Mr. Philip G. Cochran, a large coke manufacturer, died at his home in Dawson, Pa., on June 1, aged 49 years. He was formerly President of the Washington Coal & Coke Co., and was also interested in the firm of Brown & Cochran, the Washington Run R. R. Co., James Cochran's Sons & Co. and the Juniata Coke Co.

Mr. David French Boyd, President of the Louisiana State University and Agricultural and Mechanical College, died at Baton Rouge, on June 3, aged 64 years. He graduated from the University of Virginia in 1856, and entered the Confederate service during the Civil War. At the close of the war he was in the Trans-Mississippi Department of the United States Engineers, under Gen. Kirby Smith.

Mr. Isaac Gale Johnson, a well-known iron manufacturer and inventor, died at his home at Spuyten Duyvil, New York city, on June 3. In 1853 he established a large iron plant at Spuyten Duyvil, and made guns, shot and shell for use in the Civil War. He was one of the first to perfect the manufacture of malleable iron; he made the Delafield gun of 1861-65, and later took up the manufacture of steel castings for gun mounts, and made large quantities of steel projectiles for the Spanish-American war. One of his most valuable inventions was a soft-steel cap for chilled steel projectiles, vastly increasing the penetrative power of projectiles by protecting the point from damage by impact; this cap demonstrated its usefulness in the late war. Mr. Johnson leaves five sons to continue the business.

Mr. Frank Thomson, President of the Pennsylvania Railroad Co., died on June 5 at his home at Merion Station from an affection of the heart. Mr. Thomson was born in Chambersburg, Pa., on July 5, 1841, and his father was a lawyer and served two terms in Congress. After receiving a rudimentary and classical education at the Chambersburg Academy young Thomson entered the Altoona shops of the Pennsylvania R. R. and made such good use of his time that at the end of a four-year course he was a thoroughly trained mechanical engineer. He soon attracted the attention of Thomas Scott, then General Superintendent of the road, and when Mr. Scott was made an Assistant Secretary of War he appointed Frank Thomson one of his aides and chief assistants and sent him to the South and upper Southwest on duty. In June, 1864, Mr. Thomson was appointed Superintendent of the Eastern division of the Philadelphia & Erie R. R., and remained there until March, 1873, when he was made Superintendent of Motive Power at Altoona. On July 1, 1874, he became general manager of the Pennsylvania system east of Pittsburg and Erie, and he introduced the present standard track system, the system of track inspection and awards for best track sections, the superior standard of equipment, picturesque station buildings, the block signal system, etc. Mr. Thomson was largely instrumental in developing the present high grade of discipline, promotion for merit and service only, and the strict accountability of each official for which this road is noted. On Oct. 1, 1882, Mr. Thomson became Second Vice-President, and on Oct. 27, 1888, First Vice-President of the road, and in these offices he had especial charge of all freight and passenger traffic arrangements and was the administrative officer of the system. In 1897 he succeeded George B. Roberts as President of the Pennsylvania R. R. Co. Mr. Thomson devoted 38 years of his life solely to the service of the Pennsylvania R. R. His duties were so exacting that he never held other public office with the one exception of serving as a Director in the Equitable Life Assurance Society. He married a daughter of Mr. Benjamin G. Clarke, of New York. His wife died in June, 1887, leaving two sons, both students at Harvard, and one daughter. Mr. Thomson was a patron of art, literature and music, and left a valuable collection of paintings and works of art; his spare time was spent in fishing and hunting.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ENGINEERS' CLUB OF ST. LOUIS.
June 9. Secy., E. R. Fish, 2401 N. Spring Ave., St. Louis, Mo.

WISCONSIN STATE CHEMICAL ASSOCIATION.
June 9. Secy., I. Ladoff, 154 Knapp St., Milwaukee, Wis.

ST. LOUIS RAILWAY CLUB.
June 9. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

MONTANA SOCIETY OF ENGINEERS.
June 10. Butte, Mont. Secy., A. S. Hovey, Nat'l Bank Bldg., Helena, Mont.

ENGINEERS' CLUB OF KANSAS CITY.
June 12. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

THE LOUISIANA ENGINEERING SOCIETY.
June 12. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

DENVER SOCIETY OF CIVIL ENGINEERS.
June 12. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Colo.

FRANKLIN INSTITUTE.
June 13. "Water-Power Electrical Plants in the United States," B. C. Washington, Jr. Secy., Wm. H. Wahl, 15 South 7th St., Philadelphia, Pa.

AMERICAN INSTITUTE OF ARCHITECTS (New York Chapter).
June 14. Secy., Chas. I. Berg, 10 West 23d St., New York city.

THE WESTERN GAS ASSOCIATION.
June 14-16. Annual meeting, Milwaukee, Wis. Secy., Jas. W. Dunbar, New Albany, Ind.

AMERICAN RAILWAY MASTER CAR BUILDERS' ASSOCIATION and the AMERICAN RAILWAY MASTER MECHANICS' ASSOCIATION.
June 14-23. Annual meeting, Old Point Comfort, Va. Secy., John W. Cloud, 774 Rookery, Chicago, Ill.

ENGINEERS' CLUB OF CINCINNATI.
June 15. Secy., J. F. Wilson, P. O. Box. 333, Cincinnati, O.

NEW YORK RAILROAD CLUB.
June 15. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

ROCHESTER ENGINEERING SOCIETY.
June 16. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.

THE DETROIT ENGINEERING SOCIETY.
June 16. Secy., Henry Goldmark, Wayne Co. Savings Bank Bldg., Detroit, Mich.

ENGINEERS' CLUB OF COLUMBUS.
June 17. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF MINNEAPOLIS.
June 19. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
June 19. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
June 19. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
June 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

WESTERN SOCIETY OF ENGINEERS.
June 21. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

WESTERN FOUNDRYMEN'S ASSOCIATION.
June 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

BOSTON SOCIETY OF CIVIL ENGINEERS.
June 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
June 26-28. Annual meeting at Boston, Mass. Secy., Ralph W. Pope, 26 Cortlandt, St., New York city.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
June 27-30. Annual meeting at Capt May, N. J. Secy., Chas. W. Hunt, New York city.

CHICAGO ELECTRICAL ASSOCIATION.—The annual banquet of this association was held at the Technical Club of Chicago, on May 19.

MANUFACTURERS' CLUB OF CINCINNATI.—At the regular meeting of this club, held on May 22, the subject of "Technical Education" was discussed.

ROYAL SOCIETY OF CANADA.—A meeting of this society was held on May 23 to discuss the subject of Canadian water powers, and to transact the usual business of the annual meeting.

ENGINEERS' CLUB OF CINCINNATI.—The regular meeting of the club was held May 18 with 29 members and visitors present. The paper for the evening was entitled "Color," and was read by Mr. John F. Earhart.

J. F. Wilson, Secy.

THE ASSOCIATION OF RAILWAY TELEGRAPH SUPERINTENDENTS.—The tenth annual convention of this association was held at Wilmington, N. C., May 17-18. It was decided to hold the next annual meeting on the third Wednesday of June, 1900, at Detroit, Mich.

THE ENGINEERS' CLUB OF PHILADELPHIA.—A regular meeting of this club was held on May 20, with an attendance of 46 members and visitors. The evening was devoted to a topical discussion of the subject of the "Utilization of Wastes," meaning the wastes occurring in the industries allied to engineering, including the use of scrap-iron, tin-plate, the volatile matters given off in producing charcoal and coke, cotton seed, cornstalks, blast-furnace cinders, shearing, punchings, filings, the by-products from the manufacture of gas and petroleum, the waste-heaps from coal-mines, etc.

THE NEW YORK ELECTRICAL SOCIETY.—The annual meeting of this society for the election of officers was held by courtesy of the Electrical Exhibition Co., at the Madison Square Garden, New York city, on June 3. The following officers were elected for the ensuing year: Pres., Gano S. Dunn; Vice-Presidents, F. A. Pattison, C. Blizard, C. A. Doremus, Arthur Williams, F. V. Henshaw and Stephen L. Coles; Secy., Geo. H. Guy; Treas., Henry A. Sinclair. Following the business meeting, Mr. W. J. Clarke presented a lecture on the "Possibilities of Wireless Telegraphy and Telephony," which was illustrated by stereopticon views and working models.

THE SOUTHWESTERN GAS, ELECTRIC AND STREET RAILWAY ASSOCIATION.—The first annual convention of this association was held at Austin, Tex.,

on May 17-19. The following officers were elected for the ensuing year: Pres., T. D. Miller, Dallas; 1st Vice-Pres., J. F. Strickland, Waxahachie; 2d Vice-Pres., C. A. Yeager, Laredo; 3d Vice-Pres., W. E. Hamilton, Shreveport, La.; Secy., T. H. Stuart, Waco; Treas., Fred Fries, San Antonio; Directors: Carl F. Drake and Frank E. Scoville, of Austin; E. Dysterud, of Monterey, Mex.; Fred Fries, of San Antonio; E. L. Wells, of Marshall; J. C. Cullinane, of Denison. Waco, Tex., was selected as the convention city for next year.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.—The sixteenth general meeting of the Institute will be held at the Massachusetts Institute of Technology, Boston, Mass., on June 26 to 28.

The following papers will be presented: "Polyphase Electric Testing Methods," Prof. Harris J. Ryan; "Symbolic Representation of General Alternating Waves, and of Double Frequency Vector Products," Chas. P. Steinmetz; "Note on the Progress of the Closed Globe Arc Lamp," Louis B. Marks; "The Cost of Operation of Some Building Plants in New York City," Percival R. Moses; "Constant Current Transformers," Prof. W. L. Robb; "Notes on Recent Developments in Single-Phase Induction Motors," Chas. P. Steinmetz; "Elements of Design Favorable to Speed Regulation in Plants Driven by Water Power," A. V. Garratt; "Protection of Alternating Secondary Circuits," Dr. Cary T. Hutchinson; "Air Cap and Core Distribution—Part II.," Prof. W. E. Goldsborough; "Electricity in Coal Mining," Prof. J. P. Jackson. Other papers suggested but not definitely settled upon may possibly be presented by A. D. Adams, S. E. Doane, E. A. Sperry and Professor Laws.

Among the places of engineering interest which are likely to be visited are the Cambridge pumping station, the South Boston electric light station, the electric plant of the Union Ry. station, the Atlantic Avenue Edison station, the central power station of the Boston Elevated R. R., the West End power station at Cambridge, and the New Boston fire alarm station.

NEW PUBLICATIONS.

RHODE ISLAND STATE BOARD OF HEALTH.—Report for 1896. Gardner T. Swarts, M. D., Secretary, Providence. Cloth; 6 × 9 ins.; pp. 223 + 291; tables and diagrams.

This belated report contains a section on water supplies, including monthly analyses of a few sources. There are also some meteorological tables and reports regarding the sanitary improvements of towns and cities.

NEW JERSEY STATE BOARD OF HEALTH.—Report for 1897-8. Henry Mitchell, M. D., Secretary, Trenton. Cloth; 6 × 9 ins.; pp. 601; tables and illustrations.

In the reports from local boards of health some information is given regarding water supply, sewerage and garbage disposal. The secretary's report contains tabular information regarding the water-works and sewerage systems of the State. There is a brief description of a slow sand water filtration plant at Salem, N. J., by Mr. Churchill Hungerford.

ELECTRIC RAILROAD LIST.—The Railroad Gazette, 32 Park Place, New York city. Paper; 4 × 6 ins.; pp. 304; illustrated.

This is the second number of a list of electric railways in this and foreign countries, and is a quarterly publication, which was reviewed in these columns when the first number appeared. Certain improvements have been made which add materially to the value of the list. The most important of these is the first installment of a collection of "Electric Railroad Information," arranged in alphabetical order. In this such subjects as acceleration, axles, characteristic curves of motors, etc., are briefly discussed. Various tables of costs of operating electric railway plants and installing wires and feeders are included, the whole forming a serviceable collection of information.

MICHIGAN A SUMMER AND HEALTH RESORT STATE. —Compiled by Robert P. Hudson, under the direction of the State Board of Health. Issued in compliance with a concurrent resolution of the Legislature. Lansing: State Board of Health. Paper; 10 × 6 ins.; pp. 142; illustrated. 6 cts.

The character of this pamphlet is pretty well indicated by the above quotation from the title page. It is similar to the many vacation guide books issued by railways and hotels, except that it is more moderate in tone, attempts to give some indication of the local conditions related to healthfulness, and thoroughly covers the whole State. No direct evidence is given that the sanitary features of the one-hundred resorts described have been investigated by the State Board of Health, but some care seems to have been taken to learn, in a general way, the character of the water supplies and the means of sewage disposal.

ASPHALT PAVING IN NEW YORK.—Report of an Investigation Made in Connection with the Examination of the Department of Public Works, 1895, 1896 and 1897. By John C. Hertle and Edward Owen, Commissioners of Accounts of the City of New York. Paper; 6 × 9 ins.; pp. 63.

The design of this report seems to be twofold: (1) To show that unnecessarily high prices were paid for asphalt paving in the old city of New York during the republican administration of 1895-7; and (2) that the city is in the hands of an asphalt monopoly, using specifications carefully drawn to exclude all but Trinidad lake asphalt. If put forward to strengthen the present administration, the report is somewhat of the boomerang style, since on its own showing the alleged monopoly was most carefully nursed during the years preceding Mayor Strong's administration, and the so-called monopolistic clauses introduced one after another in the specifications, are given in the report as extracted from the specifications for a letting on April 4, 1899, in the Borough of Brooklyn. It is only fair to say that the report makes no attempt to obscure or belittle these facts, if such they be, but says boldly:

The present specifications of the Department of Highways for asphalt paving set up monopoly Trinidad asphalt as a standard, and preclude competition, except in so far as the Commissioner may in his discretion admit other materials.

The standard set up is artificial, arbitrary and monopolistic, and any asphalt contractor outside the monopoly would be repelled or deterred from bidding.

We have no desire to reflect on the good intentions of our Commissioner of Highways, but rather to point out and emphasize what we have shown throughout this report, namely: that information regarding this dark subject is locked up and carefully guarded as an important asset of the Trinidad monopoly, and the necessity of the employment by the city of an expert competent to advise it.

The report does maintain, however, that there had been a downward step in prices just before Mayor Strong's administration come in, which was followed by an immediate raise. It also states that for the three years 1895-7 the average price paid for asphalt in New York was $1.07 per sq. yd. more than the average paid by Philadelphia, Brooklyn, Washington and Newark, and cites figures in detail, reduced to a common basis by making deductions for grading, maintenance, interest on reserve funds, cost of bonds and concrete. Some of these deductions seem to be arbitrary figures, and possibly all of them. There is also a table showing the prices prevailing in recent years in cities confining bids to "monopoly asphalt" and allowing the use of "anti-monopoly asphalt," the latter being much lower, but the only indication that these figures are properly comparable is a statement that all the prices were for a 6-in. concrete base.

The report as a whole is an interesting one, both for the information regarding the prices paid for asphalt in New York since its first extended use, and its relation to the widespread controversy over the merits of lake and land Trinidad asphalts, and Trinidad and other products. Many cities of late have thrown down the barriers against asphalt competition formerly set up by their specifications, and most notable reductions in prices have followed. Very likely some of the reduction has been due to the general fall in prices for public works, but not all of it can be so explained.

In conclusion, if half the allegations of this report regarding monopoly prices be true, the city of New York should heap the blame on itself, rather than the contractors, and at once take up the suggestion of the report to the effect that competent expert advice be secured to guard against such practices in the future.

TRADE PUBLICATIONS

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3½ x 6 ins., and 9 x 12 ins.)

RUBBER MATS, MATTINGS AND TREADS FOR RAILWAY CARS.—The Boston Belting Co., Boston, Mass. 4-page folder.

PUMPING MACHINERY.—The John H. McGowan Co., 58 Central Ave., Cincinnati, O. Paper; 6 × 3 ins.; pp. 44; illustrated.

This catalogue describes numerous types of pumps, designed for various purposes; also air compressors.

IN THE ADIRONDACK MOUNTAINS.—"Four-track Series," No. 6. 7 × 8 ins.; paper; pp. 60. Passenger Department, New York Central & Hudson River R. R.

This little booklet describes the scenery and other attractions in New York's most popular mountain resort.

DRAFTING ROOM FURNITURE.—J. G. Alexander Manufacturing Co., Grand Rapids, Mich. Paper; 7 × 5 ins.; pp. 24; illustrated.

We here have described, priced and illustrated all manner of adjustable and folding drafting tables, office desks, file-cases, drawing boards, etc.

WATER MOTOR AND ELECTRIC FANS.—The Pelton Engineering Co., 1076 Hamilton St., Cleveland, O. Circular.

This is a small folded circular calling attention to the forms of water motor fans and electric fans manufactured by this concern.

MECHANICAL RUBBER GOODS.—The B. F. Goodrich Co., Akron, O. Pamph.; 4½ × 6½ ins.; pp. 83; illustrated.

This is an illustrated price list of rubber articles, and includes railway accessories, rubber mats, pulley or sheave fillers, washers, rings, rollers, etc.

ON THE SQUARE.—H. A. Lozier & Co., Cleveland, O. Pamph.; 6 × 9 ins.; pp. 16; illustrated.

This pamphlet is published by the manufacturers of the Cleveland bicycle for the benefit of its agents and the dealers in Cleveland bicycles, and contains short articles and items on bicycles and bicycling in general.

THE NATIONAL AUTOMATIC INJECTOR.—The National Injector Co., 97 Woodland Ave., Cleveland, O. Circular.

This is a price list of a form of automatic injector claimed by its makers to embody all the desirable features and none of the objectionable features common to the usual injector.

ELECTRIC LIGHTERS FOR GAS.—Advance Specialty Co., 119 La Salle St., Chicago. Paper; 3½ × 6¼ ins.; pp. 8; illustrated.

A small battery with ornamental case is clamped upon the gas hanger or bracket, and has a spark coil connected to the burners. A hand lighter, with electric battery in the handle, is also made.

STRUCTURAL AND ORNAMENTAL IRON WORK.—The National Iron & Wire Co., Cleveland, Ohio. Paper; 10 × 6¾ ins.; pp. 16; illustrated.

One of the specialties of this firm is the steel joist hanger for connecting beams with wood, I-beams or brick walls; a full list of sizes and prices is given. Ornamental fences and gates, pavement details, window gratings, stable fixtures, office fittings, etc., form the remainder of the contents.

CATALOGUE OF THE FOUR-TRACK SERIES.—New York Central & Hudson River R. R. Geo. H. Daniels, Gen. Pass. Agt., Grand Central Station, New York city. Pamph.; 4 × 8 ins.; pp. 32; illustrated.

This pamphlet is a brief description of the several brochures published by the passenger department of the New York Central and known as the "Four-Track Series."

GAS ENGINES, PUMPS AND SUPPLIES.—C. P. & J. Lauson, 151 West Water St., Milwaukee, Wis. Paper; 5½ × 7½ ins.; pp. 88; illustrated.

This is a catalogue and price list of a long line of supplies, including gas and gasoline engines, various kinds of power pumps, and water tanks and towers. The supplies include pulleys, belting, shafting, and all elevator and mill supplies.

METERS AND WATER-WORKS SPECIALITIES.—Union Water Meter Co., Worcester, Mass. Paper; 6 × 8 ins.; pp. 40; illustrated.

This is a descriptive catalogue and price list of Union and Columbia rotary piston meters, Ball & Fitts reciprocating piston meters, pressure regulators and tapping machines. It also contains some useful tables on the flow and pressure of water, the weight of water at different temperatures, and tables for computing meter charges.

WATER STERILIZERS.—Waterhouse-Forbes Co., 220 South Fifth St., Philadelphia. Paper; 5 × 6 ins.; pp. 19; illustrated.

This pamphlet describes apparatus for sterilizing water by boiling it, a so-called "heat exchange" being employed to bring the water nearly back to its original temperature, at the same time economizing the fuel. The apparatus may be secured in portable and stationary forms, and in sizes ranging from those suited to family use up to plants for city supplies.

A PERFECT TIME RECORDER.—Pneumatic Watchman Check Co., Columbus, O. Pamph.; 3½ × 5¾ ins.; pp. 48; illustrated.

This little pamphlet describes a form of watchman's detector or time check which depends upon compressed air for its operation. A clock device with a paper dial is centrally located with small tubes radiating to the various places where it is desirable to have the watchman visit. At these points he presses a button and the time and location are recorded on the dial.

BRONZE CASTINGS.—The Winslow Bros., Co., Chicago, Ill. Paper, 11 × 9½ ins.; pp. 31; all illustrations.

This catalogue is a series of very handsomely executed reproductions of ornamental bronze work, either designed and made by the Winslow Bros. Co., or made from the designs of prominent architects. A considerable part is devoted to mausoleum and monumental bronze work; but the exhibits also cover bronze doors, railings, lamps, fountains, column caps, memorial tablets, etc. The work shown is exceedingly artistic in design and finish.

THE TICKET USED BY ADMIRAL DEWEY in journeying from Washington to San Francisco on his way to take command of the Asiatic Squadron, has been issued in fac simile by the Passenger Department of the Baltimore & Ohio R. R. The ticket is dated Dec. 6, 1897, and bears the Admiral's signature. Prints of the ticket can be obtained by application to Mr. D. B. Martin, Passenger Traffic Manager, B. & O. R. R., Baltimore, Md.

CAMERAS AND PHOTOGRAPHIC SUPPLIES.—Western Camera Mfg. Co., 131 Wabash Ave., Chicago; 79 Nassau St., New York. Paper; 8 × 6 ins.; pp. 72; illustrated.

The company's specialty is the Cyclone camera for rapid and effective work, various forms of which (magazine and folding) are shown. There are also a number of half-tone reproductions of views taken with these cameras. About 43 pages are devoted to particulars and prices of plates, toning outfits, special lenses, shutters and other devices and supplies for use in taking and printing protographs.

HEMATITE MALLEABLE IRON AND STEEL CASTINGS.—Pratt & Letchworth Co., Buffalo, N. Y. Paper; 9 × 6 ins.; pp. 16; illustrated.

We commend a careful study of this "lecture" of Sir Ponsonby Hawkesworth, A. R. A., K. C. B., to all interested in the manufacture of steel "on the well-known Bradley-Martin principle, with original and daring modifications." With more words than facts the lecturer describes a truly wonderful manufacturing establishment, and a number of illustrations, capitally and comically drawn, help out his remarks. It is a "convention skit."

SUBURBAN HOMES NORTH OF THE HARLEM RIVER. —The N. Y. C. & H. R. R. R. Company, New York.

This is a 48-page folder which describes the towns and villages located along the lines of the Hudson River, Harlem and Putnam Divisions of the New York Central. It contains a good map of the territory bounded by Saratoga and North Adams on the north, the Litchfield and Berkshire Hills on the east and northeast, and the Hudson River and Catskill Mountains on the west.

A copy will be sent free, post-paid, to any address, upon receipt of a one-cent stamp, by George H. Daniels, General Passenger Agent, Grand Central Station, New York.

ASPHALT PAVING.—The Barber Asphalt Paving Co., Washington and New York. Paper; 7⅞ × 4⅞ ins.; pp. 114; illustrated.

This handsomely printed pamphlet gives a detailed statement, up to Jan. 1, 1899, of the area of asphalt pavement laid by this company in cities and towns of the United States. Including Canada the aggregate of work of this character done by the Barber Asphalt Co. is 11,376,466 sq. yds. The standard specifications for 1899 now call for six distinct classes of pavement, varying with the amount of traffic and the character of the foundation. They range from Class A, with 5 ins. concrete, 1½-in. binder and 2-in. asphalt surface, to Class F, for sidewalks

and driveways, with 2 ins. of broken stone and 1 in. asphalt surface. Since 1896 the company has done a large amount of work in surfacing brick pavement with 1½ ins. of asphalt; after three years' trial this resurfaced pavement has given excellent results.

PLACER GOLD DREDGE.—Bed Rock Dredge Co., Duluth, Minn. Paper; 9 × 6 ins.; pp. 31; illustrated, 12 cts.

Under the title of "Placer Gold, Where and How to Find It in the United States," Mr. Alexander McDougall, the inventor of the "whaleback" barge, gives his theories as to the origin of placer gold, and the best methods of recovering it. He truly says that the heaviest and most profitable gold is lodged in the crevices on the surface of the bed-rock, and when this rock is covered by water an ordinary dredge cannot get at the richest deposits. He has invented a dredge which he claims will perform this duty. On a scow, 40 × 26 × 3 ft., he places boiler and engines and a large centrifugal pump with a heavy pendulum suction pipe. A ladder dredge with buckets is also installed on the scow, connected with a sluice-box, riffles, etc. On a meadow, for example, with 20 ft. of gravel on the bed-rock, he would first dig a hole large enough to float the scow; put his machinery aboard and start to dredge a deeper hole. As soon as the pit is 50 × 60 ft. and cleaned down to bed-rock, he would let down spuds, rest his barge on them and pump the pit dry, if possible. He would then wash out the cracks and get at the heavy gold. The pamphlet will be sent on application.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
June 8.	Dredging, New Bedford, Mass. Advertised, Eng. News, May 11 to June 1.		May 11
June 8.	Dredging, New Haven, Conn. Advertised, Eng. News, May 11 to June 1.		May 11
June 8.	Brick paving, Scottdale, Pa. Advertised, Eng. News, May 25 and June 1.		May 25
June 8.	Sewerage system, New Brighton, Pa. Advertised, Eng. News, May 25 and June 1.		May 25
June 8.	Portland cement. Advertised, Engineering News, June 1.	Portland, Me.	June 1
June 9.	Dredging, Gulfport, Miss. Advertised, Eng. News, May 18 to June 8.		May 18
June 9.	Reservoir work, Clinton, Mass. Advertised, Eng. News, May 18 to 25.		May 18
June 9.	Water-tower, Murphysboro, Ill. Advertised, Engineering News, May 18.		May 18
June 9.	Piers, Holland, Mich.		May 11
June 9.	Dredging, Bridgeport Conn. Advertised, Eng. News, May 11 to June 1.		May 11
June 9.	Dredging, Cleveland, O. Advertised, Eng. News, May 25 and June 1.		May 25
June 9.	Removing surface soil, Clinton, Mass. Advertised, Engineering News, June 1.		June 1
June 9.	Broken stone, Passaic, N. J.		June 1
June 9.	Electric light plant, Princeton, Minn.		June 1
June 9.	Water-works, Princeton, Minn.		June 1
June 9.	Stone and steel bridges (8), Sullivan, Ind.		June 8
June 9.	Fire apparatus, New York, N. Y.		June 8
June 9.	Asphalt paving, Niagara Falls, N. Y.		June 8
June 10.	Government piers, Grand Haven, Mich. Advertised, Eng. News, May 18 to June 8.		May 18
June 10.	Street sweeper, Halifax, N. S., Can. Advertised, Eng. News, May 25 and June 1.		May 25
June 10.	School building, Washington, D. C.		June 1
June 10.	Areas, drainage, etc., Washington, D.C.		June 1
June 10.	Iron bridge, White Store, N. Y.		June 8
June 10.	Bridge, Oxford, Pa.		June 8
June 10.	Street sweepers, etc., Columbus, O.		June 8
June 10.	Structural steel, etc., Brooklyn, N. Y.		June 8
June 10.	Asylum building, Huntington, W. Va.		June 8
June 10.	Iron bridges (9), Wilkes-Barre, Pa.		June 8
June 12.	Breakwater, Larchmont, N. Y. Advertised, Eng. News, May 18 to June 8.		May 18
June 12.	Excavation, Portland, Me. Advertised, Eng. News, May 18 to June 8.		May 18
June 12.	Breakwater, Fairport Harbor, O. Advertised, Eng. News, May 18 to June 8.		May 18
June 12.	Dredging, Lubec, Me. Advertised, Eng. News, May 18 to June 8.		May 18
June 12.	Dredging, Mamaroneck Harbor, N.Y. Advertised, Eng. News, May 25 to June 8.		May 25
June 12.	School building, Warren, O.		June 1
June 12.	Paving, Camden, N. J. Advertised, Eng. News, June 1 and 8.		June 1
June 12.	Sewer, Yonkers, N. Y.		June 1
June 12.	Breakwater, Cleveland, O. Advertised, Eng. News, June 1 and 8.		June 1
June 12.	Water-works, Blooming Prairie, Minn.		June 1
June 12.	Steel bridge, Springfield, Minn.		June 1
June 12.	School building work, New York		June 8
June 12.	School buildings (2), Scranton, Pa.		June 8
June 12.	Stone bridges (37), Wilkes-Barre, Pa.		June 8
June 12.	Cedar blocks, Chicago, Ill.		June 8
June 12.	Paving, Indianapolis, Ind.		June 8
June 12.	Macadamizing, Bay City, Mich.		June 8
June 12.	Brick sidewalks, New Orleans, La.		June 8
June 12.	Sewers and paving, Uniontown, Pa.		June 8
June 12.	Stone bridge, Watertown, Mass.		June 8
June 13.	Water pipe, castings, etc., Cincinnati, O. Advertised, Eng. News, May 18 to June 8.		May 18
June 13.	Brick paving, Canandaigua, N. Y. Advertised, Eng. News, May 25 and June 1.		May 25
June 13.	Brick paving, Brazil, Ind.		June 1
June 13.	Macadamizing, Boston, Mass.		June 1
June 13.	Park shelter, Newark, N. J. Advertised, Engineering News, June 8.		June 8
June 13.	Market house work, Montreal, Que.		June 8
June 13.	Church building, Albert Lea, Minn.		June 8
June 13.	Sewers, Frankfort, Ind.		June 8
June 13.	Paving, Chicago, Ill.		June 8
June 13.	Paving, Huntington, Ind.		June 8
June 13.	Brick paving, Troy, N. Y.		June 8
June 13.	Masonry, Jersey City, N. J.		June 8
June 13.	Paving, Jersey City, N. J.		June 8
June 13.	Street improvements, Champaign, Ill. Advertised, Engineering News, June 8.		June 8
June 14.	U. S. building, Newport, Ky. Advertised, Eng. News, May 18 to 25.		May 18
June 14.	Government piers, Muskegon, Mich. Advertised, Eng. News, May 18 to June 8.		May 18
June 14.	Garbage removal, Hoboken, N. J.		May 11
June 14.	Court house, Williston, N. Dak.		May 25
June 14.	Asphalt paving, Elkhart, Ind.		June 1
June 14.	Macadamizing, Revere, Mass.		June 8
June 14.	Bridges (3), Westfield, Mass.		June 8
June 15.	Electric lighting, Petrolia, Ont.		May 11
June 15.	Pump and intake, Michigan City, Ind.		May 11
June 15.	Jail building, Oglethorpe, Ga.		May 4
June 15.	Dredging, Newport, R. I. Advertised, Eng. News, May 18 to June 8.		May 18
June 15.	Dredging, Chicago, Ill. Advertised, Eng. News, May 18 to June 8.		May 18
June 15.	Dredging, Galveston, Tex. Advertised, Eng. News, May 18 to June 8.		May 18
June 15.	Dredging, Portland, Me. Advertised, Eng. News, May 18 to June 8.		May 18
June 15.	Heating, etc., Washington, D. C.		May 18
June 15.	School building, Oglethorpe, Ga.		May 25
June 15.	Electric lighting, Abbeville, S. C.		May 25
June 15.	Electric plant, Arkansas City, Kan.		May 25
June 15.	Sewers, Glenville, O.		May 25
June 15.	Sewer bonds, Nevada City, Cal.		May 25
June 15.	Water-works, Hartford, Mich.		May 25
June 15.	Dredging, Tampa, Fla. Advertised, Eng. News, May 25 to June 8.		May 25
June 15.	Dam, masonry, etc., Clinton, Mass. Advertised, Engineering News, June 1.		June 1
June 15.	Concrete core-walls, Clinton, Mass. Advertised, Engineering News, June 1.		June 1
June 15.	Cut stone, Washington, D. C. Advertised, Eng. News, June 1 and 8.		June 1
June 15.	Bridge bonds ($8,000), Raleigh, N. C.		June 1
June 15.	Steel tank, Nappanee, Ind.		June 1
June 15.	Conduit materials, Erie, Pa.		June 8
June 15.	Convent building, Jacksonville, Fla.		June 8
June 15.	Armsy building, Seattle, Wash.		June 8
June 15.	Dredging, New Orleans, La.		June 8
June 15.	Brick sewers, Ottawa, Ont.		June 8
June 15.	Bridges (3), Urbana, Ill.		June 8
June 15.	Dams, etc., Boston, Mass. Advertised, Engineering News, June 8.		June 8
June 15.	Asphalt paving, Erie, Pa. Advertised, Engineering News, June 8.		June 8
June 15.	Sidewalks, Hoboken, N. J.		June 8
June 16.	Steel bridge, Fullerton, Neb.		May 18
June 16.	Steel bridge, Novelty, Wash.		May 25
June 16.	Pig lead, Cleveland, O.		May 25
June 16.	Brick paving, St. Louis, Mo.		June 1
June 16.	Steel bridge, Genoa, Neb.		June 1
June 16.	Steel bridges, New Castle, Ind.		June 8
June 16.	School building, Hamilton, O.		June 8
June 16.	Wharf, St. Louis, Mo.		June 8
June 16.	Paving, Buffalo, N. Y.		June 8
June 17.	Dump scows (3), Chattanooga, Tenn. Advertised, Eng. News, May 18 to June 8.		May 18
June 17.	Masonic hall, Patten, Me.		May 25
June 17.	Steel bridges (3), Salina, Kan.		June 8
June 17.	Asylum building, Bridgeport, Conn.		June 8
June 17.	Repair shop, Port Royal, S. C.		June 8
June 17.	Asylum building, Anoka, Minn.		June 8
June 17.	Asylum building, Hastings, Minn.		June 8
June 17.	Dredging, Brooklyn, N. Y.		June 8
June 17.	Paving blocks, Washington, D. C. Advertised, Engineering News, June 8.		June 8
June 17.	Street improvemnts, Rockledge, Pa.		June 8
June 17.	Sewers, Wahpeton, N. Dak. Advertised, Engineering News, June 8.		June 8
June 17.	Bridge, Winnipeg, Man.		June 8
June 17.	School building, Washington, D. C.		June 8
June 18.	Electric power, Plaquemine Bayou, La.		May 18
June 19.	Water bonds, Morton, Minn.		May 25
June 19.	Paving, Ashland, O.		May 25
June 19.	Steel bridge, Hornellsville, N. Y. Advertised, Eng. News, June 1 and 8.		June 1
June 19.	Bridges (3), Lebanon, O.		June 1
June 19.	School building, Lattasburg, O.		June 1
June 19.	School building, Carrollton, O.		June 1
June 19.	School building, Charles City, Ia.		June 1
June 19.	School building, Glenville, Minn.		June 1
June 19.	Sewer, Toledo, O.		June 1
June 19.	School building, New York, N. Y.		June 8
June 19.	Army building, Burlington, Vt.		June 8
June 19.	Army barracks, etc., Fort Meade, S. Dak.		June 8
June 19.	Iron bridge, Atlantic City, N. Y. Advertised, Engineering News, June 8.		June 8
June 19.	Street improvements, Toledo, O.		June 8
June 19.	Street improvement, Ashland, O.		June 8
June 20.	Electric lighting, Danville, Ky. Advertised, Eng. News, May 18 to June 1.		May 18
June 20.	Viaduct, Norwalk, O.		May 25
June 20.	U. S. building, Helena, Mont.		June 1
June 20.	School building, Blooming Prairie, Minn.		June 1
June 20.	Electric plant, Cincinnati, O.		June 8
June 20.	Asphalt paving, Cortland, N. Y.		June 8
June 20.	Sewers, Washington, D. C. Advertised, Engineering News, June 8.		June 8
June 20.	Public lighting, Salem, Ore.		June 8
June 21.	Rip-rap, Rock Island, Ill. Advertised, Eng. News, May 25 to June 15.		May 25
June 21.	School building, Elizabeth, N. J.		June 8
June 22.	Court house, Marietta, Ga.		May 11
June 22.	Breakwater, Calumet Harbor, Ill. Advertised, Eng. News, May 25 to June 15.		May 25
June 22.	Dredging, Coxsackie, N. Y. Advertised, Eng. News, May 25 to June 15.		May 25
June 22.	Traprock quarry, East Haven, Conn. Advertised, Eng. News, June 1 and 8.		June 1
June 22.	Steel bridges (10), Evansville, Ind.		June 8
June 22.	Lockkeeper's house, St. Paul, Minn.		June 8
June 22.	Sewers, etc., Kiowa Agency, Okla.		June 8
June 22.	Brick paving, Findlay, O.		June 8
June 23.	Iron bridges (6), Williamsport, Pa.		June 8
June 23.	Drawbridge, Orillia, Wash.		June 8
June 24.	Electric plant, Newport, R. I. Advertised, Eng. News, May 25 to June 15.		May 25
June 25.	School building, Hokah, Minn.		June 8
June 25.	Plans for sewers, Baton Rouge, La.		June 8
June 25.	Drainage, Baton Rouge, La.		June 8
June 26.	Iron bridges, Monticello, Mo.		June 1
June 26.	Rubble stone, Boston, Mass. Advertised, Eng. News, June 1 to 22.		June 1
June 26.	Excavation, Buffalo, N. Y. Advertised, Eng. News, June 1 to 22.		June 1
June 27.	Pumping engines (2), St. Louis, Mo.		May 4
June 27.	Dredging, Boston, Mass. Advertised, Eng. News, June 1 to 22.		June 1
June 27.	Tainter gates, St. Paul, Minn. Advertised, Eng. News, June 1 to 22.		June 1
June 27.	Bridge, Sauk Rapids, Minn.		June 8
June 27.	Jetties, Port Hartford, Cal.		June 8
June 27.	Harbor work, San Luis Obispo, Cal.		June 8
June 27.	Electric plant, West Newton, Pa.		June 1
June 27.	Reconstructing pumping station, St. Louis.		June 8
June 28.	Building work, Chemawa, Ore.		May 25
June 28.	Dredging, Boston, Mass. Advertised, Eng. News, June 1 to 22.		June 1
June 28.	Electric plant, St. Paris, O. Advertised, Eng. News, June 1 to 15.		June 8
June 29.	Random stone, Key West, Fla. Advertised, Eng. News, June 1 to 22.		June 1
June 29.	Dredging, Tampa, Fla. Advertised, Eng. News, June 1 to 22.		June 1
June 29.	Arch bridge, Natick, Mass.		June 8
June 30.	Street work, Parabelem, Brazil.		May 4
June 30.	Electric r'y (23 miles), Shanghai, China. Advertised, Eng. News, Nov. 17 to Dec. 8.		Mar. 2
June 30.	Tug boat, New Orleans, La.		June 8
June 30.	Levee work, New Orleans, La.		June 8
June 30.	Barges (6), New Orleans, La. Advertised, Eng. News, June 8 to 22.		June 8
June 30.	Dredging, Cleveland, O.		June 8
July 1.	Revetments, Duluth, Minn. Advertised, Eng. News, June 1 to 22.		June 1
July 1.	Reservoir and conduit, Lansingburg, N.Y.		June 8
July 1.	Ordnance supplies, Governor's Island, N.Y.		June 8
July 3.	Plans for kursaal, Harrogate, England.		May 18
July 3.	Water softening plant, Winnipeg, Man.		May 25
July 3.	Levee work, Memphis, Tenn. Advertised, Eng. News, June 8 to 29.		June 8
July 5.	Supplies, Memphis, Tenn. Advertised, Eng. News, June 8 to 29.		June 8
July 5.	Drainage system, New Orleans, La. Advertised, Eng. News, May 4 to June 29.		May 4
July 6.	Bridges, Yreka, Cal.		June 8
July 6.	Breakwater, Duluth, Minn. Advertised, Eng. News, June 8 to 29.		June 8
July 7.	Hospital plans, Redding, Cal.		June 8
July 7.	Dredging, Carver's Harbor, Me. Advertised, Eng. News, June 8 to 22.		June 8
July 8.	Bridge, Newman, Cal.		June 1
July 10.	Harbor and docks, Naples, Italy. Advertised, Engineering News, June 1.		May 11
July 15.	Irrigation systems (2), Wormser City, Mont.		June 1
July 25.	Jetty, Portland, Ore. Advertised, Eng. News, May 25 to June 8.		May 25
July 30.	Water-works, Milnor, N. Dak.		May 11
July 27.	Municipal building plans, Plumstead, Eng.		May 18
Aug. 12.	Removing rock, San Francisco, Cal. Advertised, Eng. News, June 8 to 29.		June 8
Oct. 1.	Electric street railway, Moscow, Russia.		Mar. 9
No date.	Air shaft, O'Fallon, Ill.		June 8

RAILWAYS.

ARIZONA & UTAH.—Surveys are stated to have been made between McConnico and Chloride, Ariz., 22 miles, from McConnico, near Kingman, north to White Hills, about 50 miles. Three miles have been graded and track-laying commenced by Kenefick & Lusk, Chicago, Ill. The maximum grade is 2%, and the maximum curves 8°. F. L. Underwood, Pres., 21 Nassau St., New York; S. B. McConnico, Gen Mgr., Kingman, Ariz.

BURLINGTON & MISSOURI RIVER IN NEBRASKA.—We are informed that the old grade between Arcadia and Sargent, Neb., 20 miles, is being repaired, and that track will be laid in August. The roadbed was graded ten years ago. I. S. P. Weeks, Ch. Engr., Lincoln, Neb.

CHICAGO, MILWAUKEE & ST. PAUL.—McIntosh Bros., Milwaukee, Wis., are reported to have been awarded the contract for constructing an extension to this system from Romadka to Stanley, Wis. D. J. Whittemore, Ch. Engr., Chicago.

DAHLONEGA GOLD MINING CO.—Negotiations are in progress, according to reports, for the construction of a line for this company from Dahlonega to Gainesville, Ga. J. W. Adams, Pres., Dahlonega, Ga.

DARDANELLE & OLA.—John H. Page, Pres., Dardanelle, Ark., informs us that the preliminary survey has been made and the right of way is being obtained for the proposed branch line from Dardanelle to Ola, on the Choctaw & Memphis Ry., via Centerville, 15 miles. The capital has not yet been secured, nor has the time for letting contracts been fixed. A land grant of 1,000 acres a mile was made by special act of the last state legislature. S. L. Shellenberger, South McAlester, Ind. Ter.

DREW LUMBER CO.—Reports state that preliminary surveys have been made from Mayo, Lafayette county, Fla., for a logging road to the timber lands owned by the Drew Lumber Co., southwest of Mayo. R. N. Ellis, Asst. Engr., Jacksonville, Fla.

ELK VALLEY COAL & IRON CO.—M. C. Monday, Knoxville, Tenn., is said to have been awarded the contract for building a 1¼-mile coal line for this company at Elk Valley, Tenn., to cost about $1,800. W. C. Crosier, Ch. Engr., Knoxville, Tenn.

GEORGIA & ALABAMA.—L. R. Wright, Macon, Ga., is reported to have been awarded the contract for constructing an extension of this line from Meldrim to Savannah, Ga., 16 miles. Work is to begin at once and be completed by Nov. 15. On Hutchinson Island, in Savannah Harbor, there will be about 8,000 ft. of grading and track-laying. J. Skelton Williams, Pres., Richmond, Va.; C. P. Hammond, Ch. Engr., Savannah, Ga.

HARLAN & KIRKMAN.—This company has been incorporated in Oklahoma, May 25, with $1,000,000 capital from Harlan to Kirkman, Ia., 6 miles. L. C. Lewis and G. W. Cullison, of Harlan, are incorporators.

INDIAN TERRITORY, GUTHRIE & WESTERN.—Incorporated in Oklahoma, May 25, with $1,000,000 capital stock, to build from Texarkana, Tex., to Woodward, Okla., 400 miles, and from Wagoner, Ind. Ter., to Guthrie, Okla., 130 miles. The road is designed to afford a gateway to Guthrie from Arkansas and also a line from the capital city across to the western part of the territory. The directors are: M. Luther West, Guthrie; H. C. St. Claire, Kingfisher, Okla.; Nathaniel McCay, Washington, D. C., and others.

INVERNESS & RICHMOND.—Mackenzie & Mann, Toronto, Ont., are reported to have been awarded a contract for constructing this proposed line from Caribou Cove to Broad Cove, 100 miles, for the Nova Scotia government. The local government will pay a subsidy of $4,000 a mile, and the counties of Inverness and Richmond each a subsidy of $1,000 a mile and a free right of way.

LEHIGH VALLEY.—Reports state that the entire main line of this system between New York and Buffalo, N. Y., will be equipped with the Hall automatic block signal system, which is already in use on the eastern end of the line. C. C. Rosenberg, Signal Engr., South Bethlehem, Pa.

MANKATO & NEW ULM.—John C. Murray, Cedar Rapids, Ia., has begun the construction of the first nine miles out of New Ulm, Minn., on this proposed 26-mile extension of the Chicago & Northwestern Ry. D. D. Streeter & Co., Chicago, Ill., were awarded the general contract on May 3. Work is to be completed by Dec 1. L. P. Yale, Resident Engr., Mankato.

MONTENEGRO.—Of all the European countries, Montenegro alone, up to the present time, has no railways. It is now reported that a line is to be built by the Pass of Duga, near Wiksie, to Plavnitz on Skutari Lake, through the Valley of Bielopavitch and Zetta. A Hamburg company will undertake the work.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—This company is said to contemplate the construction of a cut-off from Cravens, near Chattanooga, Tenn., to Ringgold, Ga., on the Western & Atlantic Ry., thereby shortening the distance between Atlanta and Chattanooga about ten miles; estimated cost, $100,000.

NEW ZEALAND.—In a recent interview, General Manager Ronayne, of the New Zealand Railway Department, is reported as stating that the department is about to spend $1,000,000 on new cars, locomotives and improvements. The carriages are gradually being brought to a certain standard, the new ones being a modification of the American car, and every provision for the requirements of the public are being made, so far as the means at hand will permit. They are only light railways and are being kept in as perfect condition as possible.

OREGON RAILROAD & NAVIGATION.—Surveys have been completed, according to reports, for a new line for this company from Elgin, Ore., along the Grande Ronde River to Lewiston, Idaho, 102 miles. W. H. Kennedy, Ch. Engr., Portland, Ore.

PENNSYLVANIA.—Reports state that contracts for the construction of a fourth track on the Pennsylvania R. R., from Kittanning Point to Gallitzin, Pa., were let May 29, as follows: From Gallitzin to Bennington, to George Will, of Philadelphia; from Bennington to Allegrippus, E. C. Wells, Philadelphia; from Allegrippus to Kittanning Point, H. S. Kerbaugh, Philadelphia. The work is to be completed by Nov. 1, and will involve the removal of about 125,000 cu. yds. of earth and rock. When this work is completed there will be four tracks from Altoona to Lilly, Pa.

PHILADELPHIA & READING.—This company is reported to have decided to equip its entire main line with an automatic signal system. H. K. Nichols, Ch. Engr., Philadelphia, Pa.

RANDSBURG.—An extension of this line from Randsburg, Cal., north to the Ballarat gold fields, a distance of 65 miles, is said to be projected. W. R. Woodward, Gen. Mgr., Johannesburg, Cal.

ST. ANTHONY.—Incorporated in Idaho, May 26, with a capital stock of $500,000, by E. E. Calvin, Pres.; F. W. Hills, A. J. Van Kuran and others.

ST. LOUIS & NEW ORLEANS.—This company is being organized, with $5,000,000 capital stock, to build from Memphis, Tenn., along the west bank of the Mississippi River to New Orleans, La., 550 miles. Reid Northrop, St Louis, Mo.; W. A. Percy, Memphis, Tenn., and Chas. J. Lewis, New Orleans, La., are interested.

ST. LOUIS & NORTH ARKANSAS.—This company has applied for a charter in Arkansas, with a proposed capital stock of $1,500,000, to build from Eureka Springs to Harrison, Ark., 50 miles. W. J. Wallace, Eureka Springs, Ark., and C. H. Smith, St. Louis, Mo., are directors.

SOUTHERN.—Bids are about to be asked, according to reports, for the construction of an extension to this system from Cayce's Station, near Columbia, to the Carolina Midland division at Perry, S. C., about 32 miles. W. H. Wells, Ch. Engr., Washington, D. C.

TEXAS CENTRAL.—Ricker, Lee & Co., Galveston, Tex., are reported to have received the contract for constructing an extension from Albany to Stamford, 40 miles. C. Hamilton, Vice-Pres. and Gen. Mgr., Waco, Tex.

ULSTER & DELAWARE.—Work is said to be progressing on the extension of this line from Bloomville to Oneonta, N. Y. The surveyors immediately precede the graders and are about five miles out from Bloomville. About 75 men are also at work on a heavy cut 1½ miles from Bloomville. E. Coykendall, Gen. Supt., Rondout, N. Y.

VENEZUELA.—Luis Munoz Tebar, a local engineer, has been granted the right by the government of Venezuela to construct a line from Puerto Cabello to the city of Yaritagua, State of Lara, in two sections; the first from Puerto Cabello to San Felipe, and the second from San Felipe to Yaritagua. The contract is to run 99 years from the conclusion of the work, and during the term of 40 years the government undertakes neither to construct nor to grant to any other person or company the right to construct any railway between the above-mentioned places. At the conclusion of the term of 99 years, the entire system is to become the property of the government. The first section must be completed and in operation within two years, and the second section within four years. The gage will be 1.07 meters, and the grades are not to exceed 2½%. The construction company is authorized to cut any lumber necessary for construction or maintenance, and also to take the unreclaimed lands required for the track, together with 15 meters of land on each side of the line for its stations, offices and deposits.

STREET AND ELECTRIC RAILWAYS.

BROCKTON, MASS.—The Brockton St. Ry. Co. has accepted the location for an extension on Centre St., between Commercial and Cary Sts.

CLINTON, MASS.—The Clinton & Hudson St. Ry. Co. has been organized at Clinton, with Alexander S. Paton, Leominster, Mass.; W. R. Dame, Clinton; Wm. H. Tybee, Worcester, Mass., and others as directors.

GARDNER, MASS.—It is reported that work is in progress on the Gardner, Westminster & Fitchburg St. Ry., and that the line will probably be in operation by July 10. H. E. Tatro, of Geo. E. Sleeper & Co., Boston, Mass., is the engineer in charge.

MANSFIELD, MASS.—S. W. Billings and Silas Poole, of Sharon, are directors of a new company which proposes to build an electric line from Mansfield to Stoughton, via East Foxboro and Sharon.

NEWBURYPORT, MASS.—Greeley & Davis are stated to have been awarded the contract for alterations to the power station of the Citizens' Electric Ry. Co., to cost about $10,000. Extensive improvements are also to be made to the roadbed.

BARRINGTON, R. I.—The Barrington, Warren & Bristol St. Ry. Co. has been incorporated with $500,000 capital stock, to operate a line through Barrington, Warren and Bristol. Orrin S. Anthony, Drownville, R. I.; Benj. F. Manier, Jr., Providence, R. I., are incorporators.

MILFORD, CONN.—C. W. Blakeslee & Sons, New Haven, Conn., are about to lay the second track for the Milford St. Ry. on Cherry St.

NEW BRITAIN, CONN.—Reports state that the Central Ry. & Electric Co., including 19 miles of track and the electric light plant, was sold, June 5, to R. A. C. Smith, New York, for the Connecticut Lighting & Power Co.

ELMIRA, N. Y.—P. T. Marshall, Horseheads, N. Y., informs us that surveys have been made in Horseheads and in a portion of Elmira Heights for the proposed Elmira & Corning Ry., from Elmira to Corning, via Elmira Heights, Horseheads and Big Flats, 18 miles. The capital for construction has not yet been secured. The company was incorporated May 11, with $200,000 capital stock, by Mr. Marshall and others. H. B. Rhymer, Pres., 615 Lake St., Elmira; M. Rickey, Ch. Engr., Horseheads.——We are informed that the American Engineering Co., 710 Harrison Bldg., Philadelphia, Pa., which has the contract for constructing and equipping the proposed Elmira & Seneca Lake Ry., 17 miles in length, has sub-let the following work: For overhead work, Smethurst & Allen, Philadelphia; generators and motors, Westinghouse Co., Pittsburg; boilers, Edge Moor Iron Works, Wilmington, Del.; engines, Harrisburg (Pa.) Engine Co.; cars, St. Louis (Mo.) Car Co.; eleven truss and girder bridges, Berlin Iron Bridge Co., East Berlin, Conn.; strengthening four bridges, Havana Bridge Works, Montour Falls, N. Y.; ten cattle passes, Horseheads (N. Y.) Bridge Co.; rails and special work, Carnegie Steel Co., Ltd.; pumps, Snow Steam Pump Works, Buffalo, N. Y.; ties and poles, Elmer P. Morris, New York. John E. Mulford, Pres., Montour Falls; A. M. Herbert, Ch. Engr., Montour Falls, N. Y., and Round Brook, N. J.

MOUNT VERNON, N. Y.—It is announced that the Union Ry. Co., of New York, has bought three acres of land on Eastchester Creek in this city, and that a power house will be erected thereon to furnish power for 30 miles of line.

ELIZABETH, N. J.—Louis Quien, Engr., 251 Elizabeth Ave., Elizabeth, was awarded the contract June 6 for constructing the proposed trolley line from Elizabethport to Roselle, via Elizabeth. Work is to begin at once and to be completed within four months. Other bidders were: Brubecker & Co., Philadelphia; J. G. White & Co., New York; Manhattan Construction Co. and P. L. Rehill.

KUTZTOWN, PA.—The Kutztown & Fleetwood St. Ry. Co. was incorporated June 1, with $100,000 capital stock, to build an electric line from Kutztown along the Easton Road to Moselem Springs and Fleetwood. H. J. Schmick, Pres., Hamburg, Pa.; J. M. Kutz, Mahonoy City, Pa., and S. C. Boyer, Port Clinton, Pa., are interested.

MOUNT JEWETT, PA.—The Mount Jewett & Marvin Creek St. Ry. Co. was incorporated May 31, with $54,000 capital stock, by C. E. Brown, Pres.; C. H. Williams and A. G. Phillips, all of Mount Jewett.

PITTSBURG, PA.—The Pittsburg, Hill Top & Castle Shannon St. Ry. Co., with $18,000 capital stock, and the Pittsburg & Hill Top St. Ry. Co., with $6,000 capital stock, were incorporated June 1, by Harry Moore, Pres., and J. S. McKelvey, of Pittsburg; A. C. Wetengel, Ellicott Borough, Pa.

UNIONTOWN, PA.—The Uniontown Electric Ry. Co. is reported to have ordered 120 tons of 60-lb. rails to be used in extending its lines from Mountain View Park to Lemont.

WEST CHESTER, PA.—G. W. Taft, Pres., Kennett Square, Pa., informs us that the preliminary survey has been made and right of way obtained for constructing the West Chester, Kennett Square & Wilmington Electric Ry. from Kennett township to East Maulborough township via Kennett Square, eight miles. A final survey is to be made at once. Capital has been partly secured, and contracts will be let during June. The power house will be built simultaneously with the road. Frank Wickersham, Ch. Engr., Kennett Square.

HUNTSVILLE, ALA.—T. W. Pratt has been granted a franchise for a street railway in this city. It is stated that the Dupont Syndicate, Johnstown, Pa., is interested.

CHILLICOTHE, O.—I. S. Cook, Chillicothe, informs us that the proposed Chillicothe, Mount Sterling & Columbus Electric Ry. will run from this city to Columbus, via Clarksburg, New Holland and Mount Sterling, 50 miles. The company is not yet organized and the capital is not secured, but a charter will be applied for as soon as the necessary preliminary advertising has been done.

WORTHINGTON, O.—D. E. Sullivan, Columbus, O., has about completed arrangements for building an electric line from Worthington to Delaware.

MARTINSVILLE, IND.—The council has granted franchises to the Martinsville Electric St. Ry. Co., E. F. Branch, Pres., and the Indianapolis & Martinsville Electric St. Ry. Co., J. C. Tarkington, Gen. Mgr., 218 North Meridian St.

ALTON, ILL.—J. F. Porter, Secy. and Treas. of Alton & East Alton Ry. & Power Co., Alton, informs us that work is now in progress by J. G. White & Co., 29 Broadway, New York, on this proposed electric line from Alton to East Alton, via Bozzatown, a distance of five miles.

WAUKEGAN, ILL.—Reports state that most of the right of way has been obtained for the proposed Chicago & Fox Lake Electric Ry. from Lake Bluff to Fox Lake, and that grading is expected to begin soon. S. P. Leland, Pres.; R. E. Taylor, Secy.

ELECTRIC LIGHT AND POWER.

MADISON, WIS.—Bids are asked until July 10 for electric wiring in the county court house. J. B. Oadson, County Audr.

TACOMA, WASH.—Wm. C. Halliday, Ch. Engr., Nesqually River Falls Power Co., writes us that the company has been organized to develop and use the water power of the Nesqually River as it passes through the canyon in the Moshell Mountain range near Eatonville, Pierce county, Wash. The river runs through a gorge or crevice of rock from 20 to 100 ft. wide, ranging from 100 to 300 ft. deep, and falling about 800 ft. in 3 miles. This power is located in the midst of a rapidly developing mining district, surrounded by forests of large fir, cedar and spruce.

SALEM, ORE.—Bids are asked until June 20 for lighting the streets with electricity and gas for three or five years. George Griswold, Chn. Com.

ESSEX, CONN.—T. C. Perkins & Co., Hartford, Conn., are preparing plans for a plant of 3,000 incandescent light capacity for the Essex Light & Power Co. F. R. Gallaher, Pres., Essex; C. R. Marvin, Secy., Deep River.

WALLINGFORD, CONN.—The following bids were received June 1 for furnishing and installing a plant: Siemens & Halske, Chicago, $42,500, $39,852 and $10,986; Hver & Sheehan Electrical Co., New Jersey, $42,750, $35,060 and $11,280; New England Engineering Co., Waterbury, Conn., $45,000, $35,700 and $9,862; Hawks Electric Co., Boston, $49,563, $39,600 and $9,705. Horace Botsford, Wallingford, power house, $9,514.

AVOCA, N. Y.—It is stated that E. A. Bailey, of Dundee, N. Y., has been granted a franchise.

BROOKLYN, N. Y.—The Engineering Bureau of the Navy Department has completed plans for a plant for the navy yard. The plant will cost about $100,000.

NORTH TONAWANDA, N. Y.—This place has voted to appropriate $15,000 for lighting the streets during the year.

OSWEGO, N. Y.—The General Electric Co., Schenectady, N. Y., is reported as considering the question of enlarging the plant of the People's Electric Light & Power Co., which it controls.

ATLANTIC CITY, N. J.—The John H. Rothermel Co., it is stated, will build a plant at once.

ROCKAWAY, N. J.—A company, it is stated, is being formed to build a plant with a capital stock of $15,000.

VINELAND, N. J.—An election will soon be held to vote on the question of building a plant, water-works and a sewerage system. Address W. McGeorge.

SCRANTON, PA.—The West Scranton Electric Light Co., recently incorporated, has applied for a franchise at West Scranton. Capital stock, $150,000.

SOUTH CONNELLSVILLE, PA.—Work on the plant of the Youghiogheny Light, Heat & Power Co. has been begun. Capital stock, $15,000.

STRASBURG, PA.—Lemuel Barr, it is reported, proposes to build a plant at Musselman's Mill, near Strasburg. He has also been granted a franchise in Quarryville.

YORK, PA.—The York Haven Paper Co., according to local papers, will build a plant this season at the falls of the Conewago River.

WASHINGTON, D. C.—O. T. Crosby and C. A. Leibin, representing the purchasers of the street railways in Washington, excepting the Capital Traction Co., and also of the Potomac and U. S. Electric Lighting companies, have just purchased the property and lights of the Great Falls Power Co., chartered by Maryland and Virginia several years ago. The falls lie about 14 miles above Washington, the river at that point being 2,500 ft. wide and 150 ft. above mean tide at Georgetown. A chain of islands, the largest of which is called Conn's, divide the river into two channels. The company owns and controls six small islands near the upper end of Conn's, and all of the latter, with the exception of a strip 400 ft. wide held by the government for the use of the aqueduct dam. On the Virginia shore the company owns about 100 acres extending 2½ miles along the river. The company also holds a claim on the Maryland side. It is stated that engineers are now making surveys and that when the plans of the new company are completed the consolidated railways and private parties will obtain their power and light therefrom.

MANNING, S. C.—It is proposed to build a plant and water-works, according to reports.

JENNINGS, LA.—The mayor writes us that the town is taking steps to call an election to vote on the question of issuing bonds for a plant and water-works.

SHELBYVILLE, KY.—The council is considering the question of purchasing the plant and water-works owned by the Shelbyville Water & Light Co.

CINCINNATI, O.—Bids are asked until June 20 for installing a plant in the custom house; estimated cost, $10,000. H. A. Taylor, Asst. Secy. Treasury Dept., Washington, D. C.

COSHOCTON, O.—The Merchants' Electric Light Co. will soon begin work on its proposed plant.

MASSILLON, O.—Councilman Kouth has introduced a resolution to have the city build a plant.

ST. PARIS, O.—Bids are asked until June 28 (postponement from June 15) for constructing a plant, as stated in our advertising columns. Hays Construction Co., Rogers, Trey, O.

ALPENA, MICH.—The council has been authorized to build a plant.

CHICAGO, ILL.—Bids are asked by City Electrician Ellicott for constructing a new arc light plant; estimated cost, $150,000.

O'FALLON, ILL.—A town meeting will be held June 10 to consider the question of building a plant and water-works.

QUINCY, ILL.—Press reports state that this city proposes to build a plant. City Clerk Farrar may be addressed.

COLUMBUS, WIS.—The council received bids June 6 for constructing a plant to cost about $10,000, according to reports.

LAKEFIELD, MINN.—This place voted May 29 to issue bonds for a plant and water-works, according to reports.

FALLS CITY, NEB.—Bids are asked until June 12 for building a plant, according to reports. M. N. Bair, Cy. Engr.

MOUNT VERNON, TEX.—It is stated that a company is being formed to build a plant.

BLAND, N. MEX.—The Cochiti Gold Mining Co. has decided to erect a plant at the Madrid coal mines, near Cerrillos and about 35 miles distant from Bland. E. A. Powers, Supt., has been instructed to let a contract for the delivery of a sufficient number of poles to construct the line.

SEATTLE, WASH.—It is stated that the Washington Power Transmission Co. proposes to begin work at once on its power plant on Cedar Lake. It is proposed to furnish about 4,000 HP. Dr. E. C. Kilbourne and W. J. Grambs, Mgr. Seattle Steam, Heat & Power Co., are interested.

GRASS VALLEY, CAL.—The question of issuing $20,000 in bonds for a plant is being considered. Address Mayor Clinch.

OAKLAND, CAL.—The Standard Electric Co. has decided to duplicate its plant at the Blue Lakes, at a cost of about $500,000.

REDWOOD CITY, CAL.—This place voted May 20 to issue $4,185 in bonds for a plant.

WILLCOX, ARIZ.—F. E. Cadwell and D. T. Swatlin are reported as interested in the construction of a proposed plant, ice plant, etc., to cost about $16,000.

SAN JUAN, PORTO RICO.—Press reports state that J. G. White & Co., 32 Broadway, New York, are letting contracts for an electric power plant.

NEW COMPANIES.—United Power & Transportation Co., Trenton, N. J.; $255,000; John A. Rigg, Reading, Pa.; Henry C. Moore, of Trenton; E. J. Moore, Philadelphia.

Sao Paulo Railway, Light & Power Co., Limited, Toronto, Ont.; $6,000,000; Wm. MaKenzie, Jas. Gunn and others.

Durango Electric Light Co., Durango, Colo.; J. B. Airy, Harry Jackson, N. G. White, Durango.

International Light & Power Co., El Paso, Tex.; $20,000; J. P. Dieter, Pres.; J. J. Taylor, Vice-Pres.; A. Krakauer, Treas.

Canadian Chemical Battery, Heat, Light & Power Co., at Pierre, S. Dak.; $4,000,000; Emil Grewy, Ethelbert Belknap and G.V. Pattison.

Virginia Chemical Light, Heat & Power Co., Pierre, S. Dak.; $3,000,000; Albert Mellen, E. L. Squire and S. A. Travis.

Edison Electric Co., South Bend, Ind.; $100,000; Otto M. Knoblock, George A. Baker, Albert W. Morrell.

Standard Electric Co., San Francisco, Cal.; $5,000,000; John S. Drum, Murray F. Vandall, R. W. Harrison, San Francisco.

Pascoag Light & Water Co., Pascoag, R. I.; $125,000; John T. Fiske, Jr., Andrew Luther, De Witt C. Remington, Jr.

Belmont Light & Power Co., Wheeling, W. Va.; $500; Joseph Clements, Chas. Rosser, John T. Flynn.

York Light, Heat & Power Co., Camden, N. J.; $350,000; Charles O. Frick, F. R. Hansell, John H. Cromie, Jr.

Trenton Falls Electric Light & Power Co., Utica, N. Y.; $55,000; M. J. Brayton, H. M. Scheuch, H. B. Sweet.

BRIDGES.

HARRISON, ME.—Reports state that a new steel bridge is to be erected in the village.

MONTPELIER, VT.—Reports state that the Groton Bridge & Mfg. Co. has been awarded the contract for erecting iron bridges on North Main and on Seminary Sts., at $1,200 each.

BOSTON, MASS.—It is stated that a temporary bridge is to be erected during the work of widening the Chelsea Bridge; estimated cost, $8,000.

NATICK, MASS.—Bids are asked until June 29 for building a retaining wall and an extension to the arch bridge over the Charles River. F. N. Shattuck, Chn.

SPRINGFIELD, MASS.—Reports state that the wooden bridge which crosses the Agawam River has been burned and that the town will appropriate money for a new structure.

WATERTOWN, MASS.—Bids are asked until June 12 for the construction of a stone arch bridge on Bridge St., over the Charles River. W. F. Leonard, Town Engr.

WESTFIELD, MASS.—Bids are asked until June 14 for the construction of the superstructure of three bridges for the Woronoco Street Railway. Jas H. Bryan, Pres.

ALBANY, N. Y.—Reports state that the contract for constructing a steel lift bridge over the canal at Breighton has been awarded to the Havana Bridge Works, at $22,098.

BUFFALO, N. Y.—Reports state that the contract for the construction of the substructure of the viaduct to be erected in Abbott Road has been awarded to Frank J. Reap, at $68,669.

BUFFALO, N. Y.—Press reports state that the Grand Trunk Ry. has decided to build a second bridge over the Niagara River; plans are being prepared by Chief Engineer Hobson.

COHOES, N. Y.—It is stated that the council is considering the question of erecting a viaduct over the railway crossing on Ontario St.

EAGLE BRIDGE, N. Y.—Reports state that the road commissioners are considering the erection of a new iron bridge in place of the old wooden one, which is considered unsafe.

NEW YORK, N. Y.—Press reports state that a bill has been signed by Governor Roosevelt authorizing the East River Bridge Commission to prepare plans for a permanent bridge over the East River.

SYRACUSE, N. Y.—It is stated that City Engineer Stuart has drafted a plan for the construction of a hoist bridge over the Erie Canal at Warren St.

WHITE STORE, N. Y.—Bids are asked by the town board until June 10 for the construction of an iron bridge.

ATLANTIC CITY, N. J.—Bids are asked by the bridge committee of Atlantic County Board of Chosen Freeholders until June 19 for building an iron bridge across Mullica River, in the township of Mullica, as stated in our advertising columns.

CAPE MAY, N. J.—Reports state that a new drawbridge is to be built, to be 105 ft. long, 20 ft. wide, of stone, concrete and steel construction. Address H. S. Rutherford.

OXFORD, PA.—Bids are asked by the county commissioners until June 10 for the construction of stone work for a bridge over Muddy Creek at Ferguson's Mills.

PHILADELPHIA, PA.—It is reported that the erection of an iron bridge over the Schuylkill River at Passyunk Ave. is being considered by the councils.

PITTSBURG, PA.—Press reports state that the Consolidated Traction Co. will have to build a bridge over the Junction Railway, at 33d and Liberty Sts., as a result of a Supreme Court decision.

VENANGO, PA.—It is stated that a new bridge is to be built here shortly.

WILKES-BARRE, PA.—Bids are asked until June 10 for the construction of nine iron county bridges; appropriation, $9,825; and until June 12 for the construction of 37 stone arch county bridges; appropriation, $13,110. W. D. Lloyd, County Controller.

WASHINGTON, D. C.—We are informed that the following bids have been received for the construction of a bridge in Rock Creek Park:

Toledo Bridge Co., Toledo, O.	$10,981
Berlin Iron Bridge Co., East Berlin, Conn.	11,636
*Berlin Iron Bridge Co., East Berlin, Conn.	9,207
Penn Bridge Co., Beaver Falls, Pa	12,709
Wrought Iron Bridge Co., Canton, O.	
Groton Bridge & Mfg. Co., Groton, N. Y.	14,216
*Structural Iron Co., Maltimore, Md.	14,277
McGuire & Hall, 26 Cortlandt St., New York	13,795
**Stacy B. Opdyke, Philadelphia	10,275
**Stacy B. Opdyke, Philadelphia	10,131
**F. R. Long Co, New York	15,554
*F. R. Long Co., New York	18,000
Youngstown Bridge Co., Youngstown, O	11,702

*Alternative design; **Incomplete bid.

CHERAW, S. C.—It is stated that an iron bridge will be erected over Thompson's Creek, not far from Cheraw.

TROY, O.—Bids are asked until June 9 for erecting a high truss iron bridge over Stillwater River, about 1¼ miles south of Covington, O.; to be 224 ft. long and consist of two spans; also for repairs on the Main St. River bridge at Piqua, O. J. T. Bartmess, Audr. Miami county.

EVANSVILLE, IND.—Bids are asked by the commissioners of Vanderburgh county until June 22 for the construction and erection of ten steel bridges in Vanderburgh county. Louis H. Legler, Audr.

INDIANAPOLIS, IND.—Reports state that a petition for a new full-width stone bridge over Fall Creek on Central Ave. has been filed with the county commissioners.——It is stated that Park Superintendent Power has been authorized to advertise for bids for two 250-ft. steel bicycle bridges.

NEWCASTLE, IND.—Bids are asked until June 16 for the construction of several steel bridges. White Heaton, Chn. Bd. Comrs.

SULLIVAN, IND.—Bids are asked until June 9 for the construction of eight stone and steel bridges in Jackson township. Martin M. Pope, County Comr.

WILLIAMSPORT, IND.—Bids are asked until June 23 for the construction of six iron bridges. E. C. Livengood, Chn. County Comrs.

PORT HURON, MICH.—Press reports state that the construction of bridges across Belle River at Maine City and across Pine River at St. Clair, by the proposed new electric road, has been authorized by the board of supervisors.

SAUK RAPIDS, MICH.—Bids are asked until June 27 for the repair and construction of the Mississippi wagon bridge, according to reports. A. E. Kasner, County Audr.

JOLIET, ILL.—Press reports state that the contract for the construction of the Chicago, Rock Island & Pacific R. R. bridge over the Desplaines River at Joliet has been awarded to the Chicago Bridge & Iron Co., at $14,720.

URBANA, ILL.—Bids are asked until June 15 for the construction of three highway bridges on masonry. Ira O. Baker, 702 W. University Ave., Champaign, Ill.

ST. PAUL, MINN.—A. Munster, Bridge Engr., informs us that bids are asked into July for erecting the superstructure of a bridge across the Mississippi River on line of Wabash St., to consist of three spans of 173 ft. each; estimated cost, $65,000; the contract for the substructure has been awarded to Charles Stone, at $49,915, and the contract for the removal of the old spans and building temporary bridge, to U. S. Hewit, for $7,505.

SPRINGFIELD, MINN.—Bids are asked by the county auditor until June 12 for the construction of a steel bridge across the Des Moines River at this place.

SALINA, KAN.—Bids are asked until June 17 for the construction of three steel bridges. A. L. Brown, County Clk.

CENTRAL CITY, NEB.—Press reports state that the tornado which recently passed through the northern part of Hamilton county destroyed two iron bridges across Blue River.

BROWNSVILLE, TEX.—It is stated that Wm. Anderson, a railway promoter of New York, is contemplating the building of a bridge from Brownsville to Matamoras.

WAXAHACHIE, TEX.—Reports state that the Kansas City, Pittsburg & Gulf R. R. Co. will erect a steel bridge over Waxahachie Creek.

ORILLIA, WASH.—Bids are asked by the board of commissioners until June 23 for the construction of a drawbridge, with clear openings of 80 ft. E. H. Evenson, Clk. of the Board.

WALLA WALLA, WASH.—It is reported that the following bids have been received for the erection of a steel bridge across Mill Creek, on Fourth St: Portland Bridge Co., $2,585 (awarded); Puget Sound Dredging Co., Gilbert Hunt Co., agt., $3,250; Tweenden & Mills, Tacoma, $3,740; Wolff & Zwicker, Portland, $2,898; Sayels, Clarke & Keefe, $3,356.

YREKA, CAL.—Bids are asked by the board of supervisors until July 6 for the construction of culverts and bridges for the Salmon wagon road. Robt. Rankin, Clk.

PHOENIX, ARIZ.—It is stated that the Santa Fe, Prescott & Phoenix R. R. Co. will expend about $300,000 in bridging Hell Canon.

WINNIPEG, MAN.—Bids are asked until June 17 for the construction of a bridge upon Inkster's Creek, on the main highway, west side of Red River. Geo. F. Monroe, Clk., Municipality of Kildonan.

BUILDINGS.

TOGUS, ME.—Bids are asked until June 10 for erecting an addition to the restaurant portion of the depot building at the Eastern branch of the National Home, D. V. S. S. H. Allen, Governor.

BENNINGTON, VT.—Mr. Dubee, formerly of Dubee & Belisle, Montpelier, Vt., is reported to have received the contract for erecting the new parochial school building for St. Joseph's Convent, to cost about $25,000.

BURLINGTON, VT.—Bids are asked until June 19 for construction, plumbing, heating and gas-piping of one two-company barracks, two double sets officers' quarters, etc. Capt. J. W. Heard, Q. M., Burlington.

TAUNTON, MASS.—Bids are asked by the county commissioners until June 9 for building an addition to the Bristol county jail.

BRIDGEPORT, CONN.—Bids are asked until June 17 for erecting a new building for the Bridgeport Orphan Asylum in the Black Rock district, in this city. J. F. Lewis, Pres.; W. R. Briggs, Arch.

BROOKLYN, N. Y.—Bids are asked until June 10 for the structural steel and fireproof floor for the conversion of building No. 8, New York Navy Yard, into a 2-story fireproof storehouse. M. T. Endicott, Ch. of Bureau of Yards and Docks, Washington, D. C.

BUFFALO, N. Y.—Bids will soon be asked by Swan & Faulkner, Prudential Bldg., for erecting a $75,000 apartment building.——Bids will be received at once for alterations to the residence of Carl Santz, to cost about $10,000. R. E. Williams, Arch.——Messrs. Borge and Sprague, Committee on Buildings for the Pan-American Exposition, has returned from a visit to New York and Boston architects, and it is expected that a limited number of competitive bids will soon be asked.

NEW YORK, N. Y.—Bids are asked by the secretary of the treasury, Washington, D. C., until July 3 for the purchase of the Custom House property in this city at Wall, William and Hanover Sts. and Exchange Place. The upset price is $3,000,000, and a cash payment of $750,000 is required.——Bids are asked by the board of education, at 585 Broadway, until June 12, for alterations, repairs, etc., at Public Schools 19, 20, 59, 74, 76 and 84, Borough of Manhattan; for alterations and additions to heating apparatus at Public Schools 57, 65, 68, 78 and 86, Borough of Brooklyn; for heating and ventilating apparatus and electric lighting plant for Public School 63, Borough of Brooklyn; also for heating and ventilating apparatus for Public School 75, Borough of Brooklyn.——Plans have been filed by J. W. Noble, Jr., 100 West 109th St., for a 6-story brick flat building at 42 to 46 East 28th St., to cost $150,000. A. De Seldern, Arch., 130 Broadway; by Joseph A. Stoll, 326 West 118th St., for a 7-story brick and stone flat building at 107th St. and Broadway, to cost $225,000. George Keister, Arch.; by Albert Saxe, 60 West 76th St., for a 7-story brick flat and store building at Broadway and 82d St., to cost 200,000. Stein, Cohen & Roth, Archs., 41 Union Square; by Joseph Strauss, 1355 1st Ave., for ten 4-story brick dwellings on 150th St., near Amsterdam Ave., to cost $150,000. C Steinmetz, Arch., 60 Liberty St.; by J. J. McCaffrey, 35 East 19th St., for an 8-story brick store and loft building at 10 East 18th St., to cost $160,000. Henri Fouchaux, Arch.; by S. O. Groner, 4266 Fulton St., Brooklyn, N. Y., for three 6-story brick flat and store buildings on Willis Ave., near 146th St., to cost $98,000. Schneider & Herter, Archs., Bible House; by Henry E. and Herbert James, 725 6th Ave., for four 5-story brick flat and store buildings at Brook and Westchester Aves., to cost $120,000. L. F. J. Weiher, Jr., Arch.; by Alonzo B. Kight, Owner and Arch., 102 West 81st St., for a 10-story brick flat building at Central Park West and 71st St., to cost $625,000; by Peter Doelger, 339 West 100th St., for a 3-story brick dwelling at 77th St. and the Boulevard, to cost $85,000. Charles Stegmayer, Arch.; by Daniel MacM. Niven, 45 Broadway, for four 5-story brick flat buildings on 133d St., near 12th Ave., to cost $80,000. John De Hart, Arch.—— The following bids were opened by the board of education, May 29, for heating, ventilating and electric lighting plant in Public School 168, Manhattan:

Wells & Newton Co., 231 Eldridge St	$49,684
E. Rutzler, 178 Center St	50,698
Blake & Williams, 362 West Broadway	50,745
Frank Dobson, 218 East 2d St	51,292
John Weal's Sons, 218 Center St	51,600
Evans, Almirall & Co., 44 Dey St	51,770
The Baldwin Eng. Co., 106 Beekman St	55,690
James Curran Mfg. Co., 512 West 36th St	55,700

NEW YORK, N. Y.—Bids are asked by the board of education, at 585 Broadway, until June 12, for erecting an addition to Public School 53, Borough of Brooklyn; and until June 19 for erecting an addition to Public School 64, Borough of Brooklyn; for erecting an additional story and improving the premises of Public School 11, Borough of Richmond; also, for erecting an additional story and improving the premises of Public School 27, Borough of Richmond.——The following bids were received by the board of education, New York, June 5, for repairs and additions to Public School 63, Borough of Brooklyn: W. P. McGarry, $36,607; I. J. Newman, $38,100; K. A. Murphy, $39,470; John Thatcher, $40,700; Mapes-Reeve Construction Co., $42,953.——The following bids were received by the Department of Parks, June 2, for erecting the stone columns, cornices, etc., for principal entrance to museum building, Botanical Gardens, Bronx Park: John H. Parker & Co., 256 Broadway, $12,985; P. Gallagher, 156 5th Ave., $15,000; Cullen & Dwyer, New York city, $17,270.

TROY, N. Y.—The following bids have been received for mason work on the new 5-story office building to be erected by Senator Murphy, at 4th and Fulton Sts., to have Roman pressed brick fronts and terra cotta trimmings; M. F. Cummings & Son, Archs., Troy: James H. Morrissey, $43,000; E. Broderick & Son, $39,000; T. Judge & Co., $37,000; Chas. P. Boland (accepted), $36,741.

ELIZABETH, N. J.—Bids are asked until June 21 for constructing a public school building on Jacques St., near Elizabeth Ave. A. P. Hughes, Clk. Bd. of Education; D. B. Provoost, Arch., 78 Broad St.

NEWARK, N. J.—Bids are asked until June 13 for constructing shelter No. 1 in Branch Brook Park, Newark, as stated in our advertising columns. Carrere & Hastings, Archs., 28 E. 41st St., New York; A. Church, Secy. Essex County Park Comn., 800 Broad St., Newark.

PERTH AMBOY, N. J.—Phillip H. Gill, Brooklyn, N. Y., is reported to have prepared plans for a transferring elevator to be built at once for the Lehigh Valley R. R. at this place; estimated cost, $50,000.

ELIZABETHTOWN, PA.—The German Baptist Church, in annual conference at Roanoke, Va., has decided to establish a college at this place, to cost about $100,000.

ERIE, PA.—Gunnison Bros. have been awarded the contract for erecting the new engine house at 23d and Ash Sts., at $8,242.

PHILADELPHIA, PA.—Bids are now being received by Furness & Evans, Archs., according to reports, for erecting the proposed additions to the Episcopal Academy at Locust and Juniper Sts.——Tasker & Julius have purchased the building at 48 to 52 North Delaware Ave., and will reconstruct the interior at a cost of about $75,000. It will be used for refrigerating purposes. Holt & Schober, Engrs.

SCRANTON, PA.—Bids are asked by the board of control until June 12 for erecting an 8-room school building on Ash St., Jas. H. Feeney, Arch.; also for erecting a 12-room building at Prospect Ave. and Myrtle St.; E. H Davis, Arch. E. D. Fellows, Secy.

WILMINGTON, DEL.—The following bids have been received, according to reports, for installing a heating apparatus in the high school building: H. A. Miller, $43,907; B. F. Shaw & Co., $46,987; Brinson Plumbing & Heating Co., $55,615; Joseph Jenkins, $60,000.

WASHINGTON, D. C.—Press reports state that Mr. T. E. Roessle, lessee of the Arlington Hotel, intends shortly to enlarge and remodel the house at an estimated cost of $100,000.—Work has commenced in demolishing the buildings on the site of the new government printing office, which was authorized by the last Congress to be erected at a cost of $2,000,000.—W. B. Moses & Sons intend shortly to make a large fireproof addition to their present building at F. and 11th Sts., N. W.——The Degnon-McLean Construction Co., New York, has been awarded the contract for enlarging the Southern Ry. Co.'s building.

WASHINGTON, D. C.—Bids are asked by the district commissioners until June 17 for constructing a hot air or hot blast steam heating apparatus with mechanical ventilating appliance for the Lovejoy School building; also for constructing an 8-room school building at 12th and D Sts., N. E.

BALTIMORE, MD.—John Cowan has been awarded the contract for erecting the proposed club house for the Maryland Bicycle Club on Park Heights Ave., to cost about $50,000.

HUNTINGTON, W. VA.—Bids are asked until June 10 for erecting one of the group of buildings for the West Virginia Asylum for Incurables. Mrs. Mary J. Ruffner, Pres. Bd. of Directors, Adelphi Hotel; Harrison Albright, Arch., Charleston, W. Va.

PORT ROYAL, S. C.—Bids are asked until June 17 for constructing a repair shop for steam engineering at the naval station at Port Royal. M. T. Endicott, Ch. Bureau of Yards and Docks, Washington, D. C.

JACKSONVILLE, FLA.—Bids are asked until June 15 for erecting a convent building at Duval and Market Sts. Address Rev. W. J. Kenny.

FOREST, LA.—John W. Hood & Co., Montgomery, Ala., are reported to have been awarded the contract for erecting the new court house, at $13,500. Andrew J. Bryan & Co., Archs., Atlanta, Ga.

CLEVELAND, O.—H. Q. Sargent, School Director, reports that the following lowest bids have been received for construction work on the proposed East high school building: Heintel & Kohl, buff cut stone, $11,970; James Rochford, carpenter work, $15,836; Thomas Tarbet, lath and plastering, $4,300; Auld & Conger, blackboards and base slate, $4,250; Rudolph & Son Co., galvanized iron and tin work, $2,085; Auld & Conger, slate roofing, $1,675; T. H. Brooks & Co., iron and steel, $24,847; Cleveland Window Glass Co., glass and glazing, $2,300; Bartlett Bros. Co., heating and ventilating with Webster system, $16,908; Dewstoe & Brainard Co., plumbing and gas fitting, $3,923; Joseph Burtscher, sewers, $415; Roebling Construction Co., fireproofing, $15,283; James D. Carey, cement floors, $887. The following bids were received for temperature regulation: The Powers Regulator Co., $1,750; Johnson Electric Service Co., $1,860.

HAMILTON, O.—Bids are asked until June 16 for erecting a 4-room addition to the 4th Ward school building. M. D. Lindley, Pres. Bd. of Education; Geo. Barkman, Arch.

TOLEDO, O.—The following bids have been received for heating and ventilating the Waite Ave. school building: Bryce Furnace Co., plan A, blower system, $2,295; plan B, fan system, $2,693.70; blower system, $2,994. American Foundry & Furnace Co., blower system, $4,091. Isaac D. Smead & Co., $3,760; Kruse & De Winter, Indianapolis, $3,925; Cincinnati Heating & Ventilating Co. (J. S. Otis, Mgr.), Johnson system, $3,979; Hoffman & Harpst, Monroe, $3,961.75.

TOLEDO, O.—Morgan Sheehy is reported to have received the contract for erecting a new school building on Waite Ave., at $32,940.

CHICAGO, ILL.—Plans have been completed by J. J. Flanders for a 5-story building to be erected at Canal and Forquer Sts., to cost $40,000, for B. Mackey.——Plans have been completed by Pond & Pond for a building to be erected by the Chicago Commons Association at Grand Ave. and Morgan St., to cost $40,000.——The Coliseum Co. has been granted a building permit to erect a $100,000 exposition building at 1463 to 1475 Wabash Ave.

ALBERT LEA, MINN.—Bids are asked until June 13 for erecting a brick and stone church building, 74 × 102 ft., for the First Presbyterian Church. H. N. Brown, Secy. Bldg. Com.; W. H. Hayes, Arch., Sykes Block, Minneapolis, Minn.

ANOKA, MINN.—Bids are asked until June 17 for building a wing to the Anoka Asylum. J. W. Mason, Secy. of Trustees of Minnesota State Hospitals for the Insane, Fergus Falls, Minn.; W. B. Dunnell, Arch., Minneapolis, Minn.

HASTINGS, MINN.—Bids are asked by the Minnesota State Hospital trustees until June 17 for building a wing to the Hastings Asylum. W. B. Dunnell, Arch., Minneapolis, Minn.

HASTINGS, MINN.—Bids are asked until June 12 for erecting a new high school building. Herman Kretz & Co., Archs., New York Life Bldg., St. Paul, Minn.

HOKAH, MINN.—Bids are asked until June 25 for erecting a 4-room brick school building here. Ed. Jaques, Clk. of Bd.; Stoltze & Schick, Archs., La Cross, Wis.

WARREN, MINN.—The commissioners of Marshall county have voted to erect a new court house at Warren.

ST. PAUL, MINN.—Bids are asked until June 22 for building a lock keeper's house at lock and dam No. 2, Mississippi River, between Minneapolis and St. Paul. Major F. V. Abbot, U. S. Engrs., Globe Bldg, St. Paul.

FORT MEADE, S. DAK.—Bids are asked until June 19 for the construction, heating, gas-piping and plumbing of two barracks at Fort Meade. Geo. E. Pond, Ch. Q. M., St. Paul, Minn.

FARGO, N. DAK.—J. H. Bowers, Fargo, has been awarded the contract for erecting the masonic temple, to cost $45,000 when completed.

QUEEN CITY, MO.—Bids are asked until June 12 for erecting an 8-room school building here. J. O. Coffey, Clk. Bd. of Education; Wm. F. Schrage, Arch., 557 Scheidley Bldg., Kansas City, Mo.

COLORADO SPRINGS, COLO.—A. J. Smith, Colorado Springs, has been selected as architect for the new court house to be built at Alamo Park for El Paso county, to cost about $200,000.

SEATTLE, WASH.—Bids are asked until June 15 for construction and plumbing at Marrowstone Point, near this city, of two double sets officers' quarters, one barrack, etc. Capt. W. W. Robinson, Asst. Q. M., Seattle.

STEILACOOM, WASH.—Anton Behrens, Tacoma, Wash., has been awarded the contract for erecting a new wing for the Washington Hospital for the Insane, to cost about $40,000.

REDDING, CAL.—Plans and specifications are asked until July 7 for a hospital building for Shasta county. W. O. Blodgett, County Clk.

SAN FRANCISCO, CAL.—The following bids were received by the supervising architect, Washington, D. C., May 27, for masonry work, roof covering, etc., for U. S. building in this city: Bentley Construction Co., Portland, Ore., $779,000, 20 months; Davidson Bros. Marble Co., Chicago, Ill., (A) $777,600, (B) $798,000; (C) 810,000, (D) $825,000, 20 months; Raymond Granite Co., $805,600, *$990,000, 20 months; California Construction Co., San Francisco, Rockland granite, $773,800; Raymond, $812,364; *870,000, 20 months; Wm. H. Ellis, Washington, D. C., (AA—1) $683,600, 20 months; (A—1) $745,000, *806,000, 30 months; (B—1) $745,000, *757,000; (C—1) *$768,500, 20 months; (D—1) *816,900, 30 months; (E—1) $799,000, 26 months; *816,900, 30 months; California Construction Co., Oakland, Cal., $798,775, $809,432, 20 months; Norcross Bros., Worcester, Mass., $853,000, *$853,000, 20 months; Thos. Butler, San Francisco, $795,000, *$853,000, 30 months; Geddis-Seerie Stone Co., Denver, Colo., $799,000, *$856,000, 27 months; * for marble facing.

MONTREAL, QUE.—Bids are asked until June 13 for rebuilding the front of St. Lawrence Market, and for reconstructing the pens of the Eastern Abbatoir Cattle Market; deposit, $800. L. O. David, Cy. Clk.

MOOSOMIN, N. W. TER.—Bids are asked until June 10 for erecting a 6-room school building in this town. R. D. McNaughton, Chn. School Bd.

ILFORD, ENGLAND.—The following bids have been received for erecting a town hall; B. Woollard, Arch., Finsbury Circus, E. C.: Symes, £27,969 ($139,845); Mitchell, £27,100; Patman & Fotheringham, £26,500; Chessum & Sons, £25,469; Stephens, Bastow & Co., Ltd., £24,998; Sharpe, £24,900; Pridmore, £23,948.

WATER-WORKS.

LEWISTON, ME.—D. J. McGillicuddy; Councilmen J. J. Hartley, Chas. H. Osgood, and Geo. Pottle, Mayor, are on the commission to take charge of the extension of the works.

PARIS HILL, ME.—W. B. Young, Supt. Paris Hill Water Co., writes us that the company will build gravity works, requiring about two miles of 4-in. cast-iron water pipe and about a mile of smaller pipe.

MILTON, N. H.—We are informed that surveys for the proposed works have not yet been made as the parties interested will have to get a charter. Dudley & Doherty, Engrs., Manchester, N. H.

ESSEX JUNCTION, VT.—Geo. N. Merrill, Springfield, Mass., and V. K. Nash, Worcester, Mass., have submitted reports and estimates for the proposed works.

AMESBURY, MASS.—The Powow Hill Water Co. has applied for permission to build a reservoir on Belmont St.

BOSTON, MASS.—Bids are asked until June 15 for preliminary work for the Wachusett dam, in Clinton, and for constructing concrete core walls for dams at Spot Pond, Stoneham, Mass., as stated in our advertising columns. H. H. Sprague, Chn. Metropolitan Water Bd., 3 Mount Vernon St., Boston.

FALL RIVER, MASS.—The city is being urged to build a reservoir by dredging North Watuppa Pond. The capacity will be about 24,000,000 gallons and the estimated cost is about $200,000.

WEST SPRINGFIELD, MASS.—The water commissioners of Holyoke have submitted rates at which that city will furnish water to this place. J. J. O'Keefe, Chn.

BRISTOL, CONN.—We are informed that A. B. Alderson, West Hartford, Conn., is making surveys for extending the works of the Bristol Water Co. to Forestville.

AVON, N. Y.—The question of increasing the water supply is being considered.

LANSINGBURG, N. Y.—We are informed that the commissioners have decided to act upon the report and plans for an additional water supply, submitted by C. E. Hicks, Lansingburg, in January, 1898, and on May 5 he was appointed engineer of the work. Appropriations have been made for constructing a reservoir in the valley of the Deep Kill River, and a conduit to the present distributing reservoir. The dam is to be built of masonry of the curved granite type, 336 ft. long and 49 ft. high. The conduit will be 23,600 ft. long and 14 ins. in diameter. Bids for the work will be wanted about July 1.

ROCHESTER, N. Y.—The following bids were received May 29 for 100 pieces of 36-in. cast-iron water pipe for the new mains to be laid in Caledonia Ave. and Elizabeth St.: U. S. Cast-Iron Pipe & Foundry Co., Buffalo (accepted), $5,834; Warren Foundry & Machine Co., New York, $5,847; R. D. Wood & Co., Philadelphia, $5,954; Reading Foundry Co., Reading, Pa., $6,622.

STAMFORD, N. Y.—The Stamford Water Co. proposes to put in a filter to cost about $3,500. J. C. Van Dyke and E. W. Churchill are interested.

CALDWELL, N. J.—The council has granted a franchise to the Caldwell Water Co.

ALLENTOWN, PA.—We are informed that the following bids were received May 29 for furnishing an 8,000,000-gallon pumping engine, as advertised in Engineering News: Knowles Steam Pump Works, New York, $38,000 and $30,000; Snider-Hughes Co., Cleveland, $31,500; Barr Pumping Engine Co., Philadelphia, $34,500, $26,490, $31,350 and $28,200; Henry R. Worthington, New York, $19,490, and $27,780; Holly Mfg. Co., Lockport, N. Y., $24,700, $35,800, $26,870; P. H. & F. M. Roots Co., Connersville, Ind., rotary, $19,400, $22,500; D'Auria Pumping Engine Co., Philadelphia, 10,000,000 gallons capacity, $20,000. This bid only includes the foundation.

DUNBAR, PA.—H. G. Frederick, Millersburg, Pa., is reported as interested in the proposed works for this place.

ELDRED, PA.—The Eldred Water Co. has been incorporated with a capital stock of $25,000, of which $2,500 is paid in; incorporators, Eugene Lewes, Treas., Galeton, Pa.; J. Newton Peck and Jno. F. Stone, Coudersport, Pa., and others.

MEDIA, PA.—The American Pipe Mfg. Co., 112 North Broad St., Philadelphia, has let the contract to Thos. H. Regan & Co., Fidelity Bldg., Philadelphia, for building a 10,000,000-gallon sedimentation reservoir near the present pumping station of the Springfield Water Co. J. W. Ledoux, Ch. Engr.

NICHOLSON, PA.—The question of improving the water supply is being considered.

PHOENIXVILLE, PA.—Alex. Potter, 137 Broadway, New York, is reported as making surveys for improving the works and for building a filter basin.

SCALP LEVEL, PA.—The Scalp Level Water Co. has been incorporated with a capital stock of $2,000, of which $200 is paid in; incorporators, Isaac D. Shaffer, Wm. A. Weaver and D. J. Frye.

STANTON, VA.—The question of increasing the water supply is being considered.

SPENCER, W. VA.—A. H. Witten, Recdr., writes us that no specifications for works have yet been prepared. Bonds will probably be issued in July.

THOMAS, W. VA.—The question of building works and an electric plant was voted upon June 3.

MANNING, S. C.—The city proposes to build works and an electric plant, according to reports.

ST. PETERSBURG, FLA.—The contract for building works to cost $10,000, will probably soon be let, according to reports.

BATON ROUGE, LA.—A. R. Hart, Mayor, writes us that the city proposes to purchase the works of the Baton Rouge Water Co.

JENNINGS, LA.—The mayor writes us that this place is taking steps to call an election to vote on the question of issuing bonds for works and an electric plant.

SHELBYVILLE, KY.—The question of purchasing the works of the Shelbyville Water & Light Co. is being considered.

CINCINNATI, O.—The following bids were received by the commissioners May 26 for completing a portion of the work begun by the D. Folz Asphalt Co., at the waterworks at California: E. C. Boyce, $35,476 (accepted); Strack Bros., $36,569; M. Sullivan, $38,241; A. J. Henkel & Bro., $38,130; Ryan & Hoglin, Dayton, O., $48,792.—An act will be introduced in the legislature next winter giving the Board of City Affairs authority to spend a part of the water-works balance for new boilers and one new engine for the Front St. pumping station. The improvement will cost $100,000.

COLUMBUS, O.—Mayor Swartz is quoted as stating that the work on the storage reservoir will be begun this summer. The dam at first will be but 32 ft. high, but later will be increased to a height of 52 ft. Estimated cost, including land, $175,000.

EAST LIVERPOOL, O.—The trustees have bought the necessary land for the proposed new reservoir, which it is proposed to build this summer.

LIMA, O.—The water board has decided to increase the water supply by sinking a number of new wells.

MIDDLEPORT, O.—John L. Wentz and Geo. MacDonald, of Scranton, Pa., are reported to have been granted a franchise.

DURAND, MICH.—This place voted June 5 on the question of issuing $30,000 in bonds for works, according to reports.

WAYNE, MICH.—J. B. Murphy, Trustee, writes us that it has not yet been decided to build works, but it will probably be in the near future. Population, 2,000.

HILLSBORO, ILL.—Bids are asked by the city clerk until June 9 for constructing a brick water tower and a steel tank of 100,000-gallons capacity, according to reports.

KANKAKEE, ILL.—The Kankakee Water Supply Co. has been incorporated with a capital stock of $40,000, by Daniel H. Paddock, Bert. L. Cook and John P. Pallisard.

MARTINTON, ILL.—The town board is reported as investigating the question of building works.

O'FALLON, ILL.—A town meeting will be held June 10 to arrange for the purchase of the works, and electric plant, authorized at a recent election.

HARTFORD, WIS.—This place voted May 27 by 189 for to 164 against, to issue $12,000 in bonds for works. T. Foley, Cy. Clk.

KILBOURNE, WIS.—It is proposed to build new works, according to reports.

SUN PRAIRIE, WIS.—W. G. Kirchoffer, Cy. Engr. of Baraboo, Wis., is reported as preparing plans, etc., for works for this place.

WEST BEND, WIS.—Bids are asked until June 12 for sinking a 6-in. artesian well, according to reports. H. B. Kaempfer, Cy. Clk.

HOSPERS, IA.—This place is reported to have decided to abondon the matter of constructing works, and will instead purchase a new chemical fire engine.

LAKEFIELD, MINN.—This place voted May 29 to issue bonds for works and an electric plant.

SISSETON S. DAK.—A. L. Jacobs, Minneapolis, Minn., is reported to have applied for permission to build works and an electric plant.

BOZEMAN, MONT.—Bids are asked until June 10 for furnishing 6,000 ft. of 6-in. standard cast-iron water pipe, weighing 33 lbs. to the ft., with 300 lbs. pressure; and also for furnishing the necessary special castings. B. T. Stanton, Chn. Water Com.

ORONOGO, MO.—The question of securing a water supply from the works at Webb City, is being considered.

ST. LOUIS, MO.—The following bids were received by the board of public improvements May 26 for furnishing valves, laying water pipe, etc.: Stop valves, 192—Michigan Brass & Iron Co., Detroit, $12,688; Fulton Iron Wks., St. Louis, $12,841; St. Louis Iron & Machine Co., $12,839. Fire plugs, 300—St. Louis Iron & Machine Co. (lowest bid), $6,913; pipe-laying—R. J. McDonald & Co. (lowest bid), $17,720; eight bids were received; pipe-laying—E. Whelen (lowest bid), $5,891, nine bids were received.

ST. LOUIS, MO.—Bids are asked until June 27 for reconstructing high-service engine house No. 1. The work will include 186,600 lbs. of iron and steel work, 6,080 cu. ft. of concrete, 5,200 cu. ft. of brick masonry, etc. Robt. E. McMath, Pres. Bd. Pub. Wks.

HUBBARD CITY, TEX.—T. C. Morgan writes us that the council has made a contract with O. J. Gorman, Dallas, Tex., to build works to cost $20,500.

KIOWA AGENCY, OKLA.—Bids are asked until June 22 for furnishing the materials and for constructing waterworks and sewerage system at three schools under the charge of the Kiowa Agency. W. T. Walker, U. S. Agent, Anadarko, Okla.; W. A. Jones, Indian Comr., Washington.

FOWLER, COLO.—Henry M. Fosdick, W. M. Berry and J. J. Brown have formed a company with a capital stock of $5,000, to build works. The water supply will be secured from a spring two miles distant.

LAKEVIEW, ORE.—This place has voted against issuing $25,000 in bonds for works, but it is stated that it will again vote upon the question. W. T. Boyd, Recdr.

LOS ANGELES, CAL.—City Engineer Olmsted is making surveys for a conduit from the river when the city secures control of the works.

ONTARIO, CAL.—The Ontario Water Co. has been incorporated with a capital stock of $100,000, of which $32,080 has been subscribed; directors, A. J. Wallace, Los Angeles, Cal., and H. H. Healy, Ontario, and others.

REDWOOD CITY, CAL.—This place has voted to issue $8,000 in bonds for new water mains.

MONTREAL, QUE.—The committee has been recommended to urge the purchase of a new 5,000,000-gallon pump.

CREEMORE, ONT.—The building of works to cost $12,000 is reported as being urged.

CALGARY, N. W. TER.—The Calgary Gas & Water Works Co. is reported to have offered to sell its property for $110,000. It is said, however, that the city will build new works for $90,000, this sum having been authorized at a recent election.

VERNON, B. C.—F. H. Latimer has been directed to prepare plans for works to cost about $30,000.

PONCE, PORTO RICO.—Galvin R. Graham, of Somerville, Mass., is reported to have been engaged to make soundings preparatory to sinking artesian wells for a water supply.

SEWERAGE.

ROCKLAND, ME.—Leon O. Norman, Cy. Engr., writes us that the council has voted to extend the sewers about 3,000 ft., and also to construct a cement or concrete walk. J. L. Cross, Chn. Com.

MANCHESTER, N. H.—The residents of East Manchester have asked the council to build a sewer 3,500 ft. long in that part of the city.

BUFFALO, N. Y.—Bids are asked by the department of public works until June 16 for constructing sewers in Geary and North Division Sts. R. G. Parsons, Secy.

CANAJOHARIE, N. Y.—Reports state that F. E. Crane, Cy. Engr. of Amsterdam, N. Y., has been engaged to make surveys for a system.

LITTLE FALLS, N. Y.—The board of public works has asked for bids for constructing a 24-in. pipe sewer in East Main St.

SIDNEY, N. Y.—Bids are asked until June 16 for the construction of about 1,400 ft. long of sewers. Chas. H. Seeley, Clk.

SYRACUSE, N. Y.—The residents of the north side have asked the council to build a trunk sewer there.

WATERTOWN, N. Y.—This city voted May 29 to issue $51,515 in bonds for a trunk sewer. City Clerk Muzzy may be addressed.

CARNEGIE, PA.—Thos. Prosser has been awarded the contract for building an intercepting sewer at $10,900.

CHARLEROI, PA.—An election will be held July 11 to vote on the question of issuing $96,250 in bonds for sewers, paving, etc., according to reports.

LEBANON, PA.—T. R. Crowell, Lebanon, and Jas. H Fuertes, 100 William St., New York, have been engaged to prepare plans for a system.

UNIONTOWN, PA.—Bids are asked until June 12 for constructing 2,500 ft. of 20-in. and 400 ft. of 18-in. pipe sewers. Cooper & Van Swearingen, Engrs.

WASHINGTON, D. C.—Bids are asked by the district commissioners until June 20 for constructing sewers, as stated in our advertising columns.

BIRMINGHAM, ALA.—C. M. Burkhalter & Co., of this city, has contracts for building six miles of lateral sewers and for building four miles of brick and pipe sewers.

BATON ROUGE, LA.—Plans and specifications are asked by the board of public works until June 25 for a system of sewerage and also for a drainage system.

NEW ORLEANS, LA.—This city voted June 6 to issue $30,000,000 in bonds for a system of sewerage and a system of drainage.

KNOXVILLE, TENN.—J. A. Ahler has been awarded the contract for a certain sewer at $1,773.

MINSTER, O.—This place voted May 29 on the question of issuing $6,000 in bonds for sewers and improving the streets. Aug. Schunck, Clk.

FRANKFORT, IND.—Bids are asked until June 13 for constructing about 14,000 ft. of 10 to 6-in. pipe sewers; average cut, 8½ ft. C. C. Brown, Cy. Engr.

DELRAY, MICH.—The council has instructed Henry J. Hall, Surveyor, 692 14th Ave., Detroit, who superintended the construction of Delray's first section of sewers, to take levels and make profiles, plans and specifications for another section, to be ready for advertising by June 25.

CHICAGO, ILL.—Bids are asked until 11 a. m., June 10, for furnishing about 1,000,000 brick for the bureau of sewers. L. E. McGann, Comr. Pub. Wks.—The council has passed an ordinance authorizing the city engineer to prepare plans for a system for the territory in the town of Lake, between Oakley and Kedjee Aves. and 39th and 79th Sts. The outlet of the system will be into the drainage channel.

CHICAGO, ILL.—Bids are asked by the board of local improvements until June 13 for the construction of sewers in 13 streets. L. E. McGann, Pres.

NEENAH, WIS.—Thos. Higgins, Mayor, writes us that the contract has been let for a sewer outfall and a few hundred feet of sewers. Plans are being prepared for the balance of the town and it is probable that some work will be done inside of a year.

ST. PAUL, MINN.—Bids are asked until June 12 for constructing a sewer in Jessamine St. from Payne to Greenbrier Aves. C. H. Bronson, Clk. Bd. Pub. Wks.

WAHPETON, N. DAK.—Bids are asked until June 17 for constructing brick and pipe sewers, as stated in our advertising columns. E. A. Aspinwall, Cy. Audr.

CARROLLTON, MO.—We are informed that the following bids were received May 29 for constructing a system, as advertised in Engineering News; Hiram Phillips, Consult. Engr., 525 Lincoln Trust Bldg., St. Louis, Mo.:

*Matt & Roberts, Independence, Mo.	$20,559
M. S. Jackson, Cedar Rapids, Ia.	22,898
John Hurley & Co., Des Moines, Ia.	23,299
Likes' Improvement Co., Des Moines, Ia.	23,422
Thos. Hogan, Boonville, Mo.	24,259
C. D. Budd, St. Louis, Mo.	24,999
McMahon & Cooney, St. Louis, Mo.	25,588
M. V. Kennedy, Des Moines, Ia.	26,775
M. L. Kinlen, Kansas City, Mo.	27,000
Black & Laird, Des Moines, Ia.	29,599

*Awarded contract, subject to investigation of securities.

GRASS VALLEY, CAL.—Bids have been asked by the city trustees for constructing about 8,000 ft. of sewers in certain streets.

KIOWA AGENCY, OKLA.—Bids are asked until June 22 for constructing sewers and water-works at the Kiowa Agency. W. T. Walker, U. S. Indian Agent, Onadaiko, Okla.; W. A. Jones, Indian Comr., Washington, D. C.

PRESCOTT, ARIZ.—It is reported that Geo. W. Sturtevant, Jr., has been awarded the contract at about $75,000 for constructing a system and making certain repairs to the water-works.

RED BLUFF, CAL.—W. L. Bransford, Mayor, writes us that there will be about nine miles of 16 to 4-in. pipe in the proposed system; estimated cost, $35,000. The proposition to build carried at the recent election. W. F. Luning, Engr., Red Bluff.

GRANBY, QUE.—Plans for a system are reported to have been prepared by Connell & Marion, New York Life Bldg., Montreal, Que.

OTTAWA, ONT.—Bids are asked until June 15 for constructing 6,400 ft. of 5-ft. and 1,660 ft. of 4-ft. circular brick sewer; average cut, 15 ft., through rock and earth. S. J. Davis, Chn. Com.

GARBAGE DISPOSAL—STREET CLEANING

BINGHAMTON, N. Y.—The following bids were received May 26 for collecting and disposing of the city garbage, (1) being for one year, (2) for three years, (3) for five years, (4) for ten years: Geo. L. Harding, (1) $10,000 a year; (2) $9,000 a year; (3) $8,000 a year; The Thackeray Incinerating & Fertilizing Co., New York and San Francisco, Cal., (1) $14,000; (2) $13,000; (3) $12,500; (4) $11,500; J. R. Gilkyson, Trenton, N. J., R. A. Fordham and others, (1, 2 and 3) $12,000 a year; (4) $10,800, $11,100, $11,400 $11,700 each a year for the first four years and $12,000 a year for the last six years. The bids, with the exception of Mr. Harding's, provide for the disposition of the garbage by cremation. Harding proposes to bury the refuse.

NEW YORK, N. Y.—Jas. McCartney, Comr. St. Cleaning, 346 Broadway, will offer for sale, at auction, 11 a. m., June 9, the superstructure of the steel pocket dump at the foot of W. 131st St., Manhattan.

COLUMBUS, O.—Bids are asked until 2 p. m., June 10, for furnishing the necessary machinery, tools, wagons, etc., for sprinkling and cleaning the streets. The following are required: 4 sprinkling wagons, 10 street sweepers, 5 dirt carts, 25 hand carts for patrol service, 10 scrapers, and such other material and appliances as may be necessary for operation of a street-cleaning department. Lynn W. P. Neereamer, Clk. Bd. Pub. Wks.

EAST LIVERPOOL, O.—Geo. Olnhausen has been visiting various cities to secure information for a plant for this city.

STREETS AND ROADS

BOSTON, MASS.—Bids are asked by the street department until June 13 for constructing a telford macadam road in Columbia road. Benj. W. Wells, Supt. of Sts.

REVERE, MASS.—Bids are asked by the Board of Selectmen until June 14 for building about 2,000 ft. of macadam roads.

WINTHROP, MASS.—Reports state that it has been voted to rebuild Crest Ave.; estimated cost, $50,000.

WOBURN, MASS.—It is reported that the council has appropriated $1,325 for the purchase of a stone crusher.

BROOKLYN, N. Y.—Press reports state that resolutions have been adopted for granite paving to the extent of $167,000.

BUFFALO, N. Y.—Bids are asked by the Board of Public Works until June 16 for paving Clare St. from Clinton St. to Olga Place. R. G. Parsons, Secy.—The following bids have been received for repaving Exchange St. between Main and Louisiana Sts.: Barber Asphalt Paving Co., $17,628 (accepted); German Rock Asphalt Co., Trinidad asphalt, $17,793; H. P. Burgard, Alcatraz asphalt, $17,791; Christopher Smith, Medina sandstone, $20,743; P. B. McNaughton, brick, $17,880; American Contracting Co., Bermudez asphalt, $18,080. Repaving Michigan St. between Carroll and Swan Sts.: Barber company, Bermudez asphalt, $3,721 (accepted); American Contracting Co., Pitch Lake asphalt, $3,780; German Rock company, Trinidad asphalt, $3,756; P. B. McNaughton, Medina sandstone, $5,276; George W. Moore, Medina sandstone, $5,200; Christopher Smith, pressed brick, $6,517; G. W. Patridge, brick, $3,860; H. P. Burgard, Alcatraz asphalt, $3,775.

CORTLAND, N. Y.—Bids are asked until about June 20 for asphalt paving, to cost about $40,000, according to reports. Henry C. Allen, Engr., Syracuse, N. Y.; Fred. C. Hatch, Cy. Clk.

FULTON, N. Y.—The following bids have been received for paving in three streets: John W. Bustin, Syracuse, $8,168; Walter Bradley Co., Oswego, $8,359 (accepted); Joseph Connors, Fulton, $8,641; Thomas Marvin, Fulton, $8,911; Ed. Quirk, Fulton, $9,015.

NEWBURGH, N. Y.—Reports state that the contract for paving Liberty St. between Broadway and Renwick St. has been awarded to the Hastings Pavement Co.

NIAGARA FALLS, N. Y.—Bids are asked until June 9 for paving Pine Ave. from the east line of Ninth St. to the west line of 22d St. with asphalt. Walter Jones, Cy. Engr.; S. F. Arkush, Cy. Clk.

ROCHESTER, N. Y.—It is stated that the following bids have been received for macadamizing Ridge Road: Chambers & Casey, trap rock, $33,900; limestone, $32,700; Gillette, Hay & Gillette, trap rock, $25,700; limestone throughout, $25,500; sandstone and limestone, $25,000.

TROY, N. Y.—Bids are asked until June 13 for brick paving in four streets. E. Ogden Ross, Secy.

WHITE PLAINS, N. Y.—Reports state that the contract for paving Spring and Grove Sts. was awarded to Duffy & McCabe, June 5; the work will cost about $20,000.

HOBOKEN, N. J.—Bids are asked until June 15 for furnishing the material and labor required for improving the sidewalks of the Hoboken extension of the Branch Road. John P. Egan, Clk.

JERSEY CITY, N. J.—Bids are asked until June 13 for asphalt, macadam and Belgian block pavement in four streets. Geo. T. Bouton, Clk.

STOCKTON, N. J.—Reports state that the council has decided to pave half a dozen more streets with asphalt in West Camden.

ERIE, PA.—Bids are asked until June 15 for 4,400 sq. yds. of sheet asphalt paving, as stated in our advertising columns. B. E. Briggs, Cy. Engr.—The contract for repaving Sassafras St. has been awarded to Mayer Bros., at $4,000.

ERIE, PA.—Reports state that it was decided June 1 to readvertise for bids for aspalht paving on Walnut St.

LANCASTER, PA.—Bids will soon be asked for macadamizing in several streets, according to reports.

ROCKLEDGE, PA.—Bids are asked until June 17 for the improvement of certain streets. Benjamin Franklin, Borough Engr., 18 South Broad St., Philadelphia.

UNIONTOWN, PA.—Bids are asked by the council until June 12 for grading, paving and curbing in six streets, and for furnishing about 850,000 vitrified paving brick. Cooper & Van Swearingen, Borough Solicitors.

SCRANTON, PA.—Reports state that the ordinance reappropriating $17,520 for asphalt repaving has been passed.

WASHINGTON, D. C.—Bids are asked by the District Commissioners until June 17 for furnishing vitrified paving blocks, as stated in our advertising columns.

MACON, GA.—It is stated that it has been decided to pave Cotton Ave. with vitrified brick, from Second to Poplar St.

BIRMINGHAM, ALA.—C. M. Burkhalter & Co. have been awarded contracts for grading and macadamizing to cost about $20,000; also for grading, curbing and guttering in Avondale to cost $5,000.—Ordinances have been adopted for certain grading, curbing and macadamizing.

NEW ORLEANS, LA.—Bids are asked until June 12 for paving brick sidewalks on 14 streets. W. I. Douglass, Comptroller.

CLEVELAND, TENN.—Reports state that $100,000 has been appropriated for the construction of seven macadamized roads to run 12 miles each in different directions from Cleveland.

MAYNARDVILLE, TENN.—It is stated that Wm. A. Park has been awarded the contract to survey the route of the new pike road to be built in Union county. About $50,000 is to be spent on the county roads.

LOUISVILLE, KY.—Reports state that it has been decided to reconstruct three streets with brick, at a cost of $16,000.

ASHLAND, O.—Bids are asked until June 19 for improving 2d St. from Orange to Cottage St., according to reports. E. B. Westover, Village Clk.

FINDLAY, O.—Bids are asked until June 22 for brick paving on Hancock St. from the east side of Main St. to the west side of Washington Ave. A. W. Ray, Clk.

TOLEDO, O.—Bids are asked until June 19 for the improvement of five streets. Wm. H. Holst, Cy. Clk.—Ordinances have been adopted for the improvement of seven streets.

WAUSEON, O.—Riggs & Sherman, The Nasby, Toledo, O., have been engaged to prepare plans and specifications for about 16,000 yds. of street paving.

BLOOMINGTON, IND.—It is stated that Perry township has voted about $30,000 for constructing pike roads.

HUNTINGTON, IND.—Bids are asked until June 13 for 9,000 sq. yds. brick or asphalt paving and about 6,000 ft. curbing, according to reports. Frank Guthrie, Cy. Engr.

INDIANAPOLIS, IND.—Bids are asked by the Department of Public Works until June 12 for asphalt paving in one street, for grading and graveling in five alleys, for brick paving in two streets and for the improvement of the sidewalks in five streets.

RILEY, KAN.—Reports state that the following bids have been received for building gravel roads: W. C. Dorsey, of Terre Haute, $26,789 (accepted); Butler & Clark, $28,523.

BAY CITY, MICH.—Bids are asked by the city clerk until June 12 for macadamizing one mile of Henry St.

CHAMPAIGN, ILL.—Bids are asked by the board of local improvements until June 13 for grading, paving, draining and curbing University Ave, as stated in our advertising columns.

CHICAGO, ILL.—Bids are asked until June 13 for curbing, grading and paving with cedar block, asphalt, brick and macadam pavement in 27 streets; also until June 12 for furnishing and delivering No. 2 cedar blocks. L. E. McGann, Comr. Pub. Wks.

LA SALLE, ILL.—Bids were received June 2 for 59,493 sq. yds. of brick paving. W. F. McNamara, Pres. Bd. Local Impvts.

WATERTOWN, WIS.—Reports state that the following bids have been received for street improvement: A. E. Rutledge, Rockford, Ill., $29,731; J. O. Jones, Racine, Wis., $33,111; J. A. Foster & Co., Attica, Ind., $32,004; Donohue & Hoff, Milwaukee, Wis., $43,702; L. Schoenlaub, Fond du Lac, Wis., $28,504 (accepted); J. Cape & Sons, Racine, Wis., $33,742; Gorder & Tetzlaff, Watertown, Wis., $38,504; Reichert Construction Co., Racine, Wis., $32,992; O. Dieman, Waukesha, Wis., $31,657; Smith, Moss & Brown, Chicago, $30,031.

POTWIN, KAN.—Reports state that it is proposed to pave Greenwood Ave. with vitrified brick.

TOPEKA, KAN.—It is reported that resolutions have been passed for the pavement of several streets.

OMAHA, NEB.—Press reports state that the Board of Public Works has been ordered to pave with asphalt the intersections of four streets.

SEATTLE, WASH.—It is stated that the council has appropriated $3,000 for the improvement of the Magnolia Bluff Military Road. R. H. Thomson, Cy. Engr.

NEW KINGSTON, ONT.—Press reports state that the ratepayers of Hamilton have carried a by-law authorizing the borrowing of $150,000 to be expended in the construction of permanent roadways.

WALKERVILLE, ONT.—Bids are asked until June 10 for constructing about 12,100 sq. ft. of granolithic sidewalks on three streets. Cecil H. Robinson, Town Clk.

MISCELLANEOUS CONTRACTS.

LIGHTHOUSE TENDER.—Chicago, Ill.—Reports state that bids will soon be asked for a steel screw steamer for lake service.

DRY DOCK.—San Francisco, Cal.—Reports state that the dry dock at Hunter's Point is to be lengthened to 610 ft. on the bottom.

SHIP CANAL.—Toledo, O.—Press reports state that the surveyors have commenced work at Bucyrus on the proposed Ohio ship canal.

DREDGING.—New Orleans, La.—Bids are asked until June 15 for dredging at Sabine Pass, Tex. Major James B. Quinn, U. S. Engrs.

CANAL.—Baltimore, Md.—It is reported that the Chesapeake & Ohio canal is to be purchased from the state by the Baltimore & Ohio R. R. Co., at $300,000.

TUNNEL.—Jersey City, N. J.—Reports state that the sale of the old North River tunnel, which was first set for May 3, has been postponed until June 16.

DRAINAGE.—Baton Rouge, La.—Bids are asked by the board of public works until June 25 for plans and specifications for a sewerage system and drainage.

IRON PIER.—Northville (L. I.), N. Y.—The question of erecting an iron pier off this place into Long Island Sound is being considered; $7,000 has been subscribed.

FIRE-ALARM SYSTEM.—Long Branch, N. J.—It is stated that the commissioners are contemplating the reconstruction of the fire alarm system at a cost of $2,200.

WHARF.—Vancouver, B. C.—It is reported that the contract for the construction of Heatley Ave. wharf has been awarded to Ironsides, Campbell & Rennie, at $8,453.

FORTRESS.—Halifax, N. S.—It is stated that the authorities have decided to construct a new fortress near Herring Cove Head, south of York redoubt, facing the sea.

JETTIES.—Port Hartford, Cal.—Bids are asked until June 27 for completion of the jetties being constructed by the government at Port Hartford; estimated cost, $55,000.

CONDUIT MATERIALS.—Erie, Pa.—Bids are asked until June 15 for furnishing materials and constructing certain equipments to the conduit system. B. E. Briggs, Cy. Engr.

TUGBOAT.—New Orleans, La.—Bids are asked until June 30 for furnishing steel or iron tugboat about 90 ft. long with compound engines. Maj. Geo. McC. Derby, U. S. Engrs.

TENSILE TESTING MACHINE.—Columbus, O.—The Rarig Engineering Co., Columbus, is in the market for a tensile testing machine, with a capacity of from 50,000 to 100,000 lbs.

BARGES.—New Orleans, La.—Bids are asked until June 30 for constructing six decked barges, as stated in our advertising columns. Maj. G. McC. Derby, U. S. Engr., New Orleans.

DREDGING.—Carvers Harbor, Me.—Bids are asked until July 7 for dredging Carvers Harbor, Me., as stated in our advertising columns. Maj. S. W. Roessler, U. S. Engr., Portland.

SUPPLIES.—Memphis, Tenn.—Bids are asked until July 5 for furnishing brush, poles, stone, wire, etc., as stated in our advertising columns. Capt. E. E. Winslow, U. S. Engr., Memphis.

HARBOR WORK.—San Luis Obispo, Cal.—Bids are asked until June 27 for continuing construction of breakwater at San Luis Obispo Harbor. Capt. James J. Meyler, U. S. Engrs.

FIRE ENGINES.—Chicago, Ill.—E. J. Sweenie, Fire Marshal, informs us that the American Fire Engine Co., of Cincinnati, O., has submitted a bid for four steam fire engines at $16,800.

WHARF.—St. Louis, Mo.—Bids are asked by the board of public improvements until June 16 for repairing the wharf with granite and limestone paving blocks from July 1, 1899, to July 1, 1900.

AIR SHAFT.—O'Fallon, Ill.—Bids are asked by W. B. Poland, Engr. of Construction of the B. & O. S. W. R. R., Cincinnati, O., for the construction of air shaft, 5 × 7, 200 ft. deep, near O'Fallon.

DREDGING.—Brooklyn, N. Y.—Bids are asked by the navy department, Washington, D. C., until June 17 for the removal by dredging of 500,000 yds. from Whitney basin, Navy Yard, Brooklyn.

WHARVES.—San Francisco, Cal.—Reports state that Commissioners Herold and Kilburn have decided to rebuild Howard St. wharves, 1 and 2, and Harrison St. wharf, at a cost of about $17,000.

REMOVING ROCK.—San Francisco, Cal.—Bids are asked until Aug. 12 for removing rocks in San Francisco Harbor, as stated in our advertising columns. Maj. W. H. Heuer, U. S. Engr., San Francisco.

HARBOR WORK.—Racine, Wis.—Reports state that the following bids were received June 1 for the improvement to Racine Harbor: Lydon & Drews, of Chicago, $172,464; Edward Gillen, of Racine, $144,338.

BREAKWATER.—Duluth, Minn.—Bids are asked until July 6 for building extension to breakwater at Presque Isle Point, Marquette, Mich., as stated in our advertising columns. Major Clinton B. Sears, U. S. Engrs.

TELEPHONES.—New York, N. Y.—Bids are asked by the department of public charities until June 12 for overhauling, complete repair and maintenance of interior telephones belonging to the department of public charities.

DREDGING.—Cleveland, O.—Bids are asked until June 30 for dredging in straight channel through Maumee River and Bay, and for constructing dike between turnout channels, Toledo Harbor, O. Col. Jared A. Smith, U. S. Engrs.

ORDNANCE SUPPLIES.—Governor's Island, N. Y.—Bids are asked until July 1 for furnishing iron, steel, hardware, lumber, electric material and supplies, etc., during year ending June 30, 1900. Major Frank Heath, Ordnance Dept.

LEVEE WORK.—Memphis, Tenn.—Bids are asked until July 3 for constructing and repairing levees in Upper and Lower St. Francis and other levee districts, as stated in our advertising columns. Capt. E. E. Winslow, U. S. Engrs., Memphis.

LEVEE WORK.—New Orleans, La.—Bids are asked until June 30 for constructing a new levee from Evergreen to Bondurant, Tensas Parish, La., about seven miles long, containing about 1,125,000 cu. yds. Maj. Geo. McC. Derby, U. S. Engrs.

MASONRY.—Jersey City, N. J.—Bids are asked until June 13 for pointing up of masonry work, painting and coating chimney with cement and slate roofing for the high-service pumping station of the water-works on Summit Ave. Geo. T. Bauton, Clk.

PLANS FOR MEADOW DRAINAGE.—Newark, N. J.—Prizes are to be awarded in July by the board of street and water commissioners for the best plans for draining the meadows in the 9th, 10th and 12th wards, as follows: $500 for the first, $300 for the second and $200 for the third.

FIRE APPARATUS.—New York, N. Y.—Bids are asked by the fire department until June 9 for six hose wagons, one hook and ladder truck, three extension ladder trucks, three combination hook and ladder trucks and chemical engines and one steam fire engine. John J. Scannell, Comr.

DOCK.—Stockton, New South Wales.—The construction of a modern graving dock at Stockton, at an estimated cost of $750,000, and of a floating dock at Carrington, at a cost of $250,000, is proposed. The larger of the two undertakings will be carried out by an English syndicate, whilst a company of Sydney and Newcastle capitalists has been formed to construct the floating dock at Carrington.

REMOVING ROCK.—East River, N. Y.—The following bids were received June 3 by the U. S. engineers, Army Bldg., New York, for the removal of Man-'o-War rock, East River, N. Y., to a depth of 26 ft. mean low water: P. Sanford Ross (Inc.), 277 Washington St., Jersey City, N. J., $246,500; George A. Rogers, Plattsburgh, N. Y., $284,520; F. W. Dashe, Arlington, N. J., $240,000; R. G. Packard Co., 130 Pearl St., New York, $159,000; Dunbar & Sullivan, Buffalo, N. Y., $199,000; Sherly Onderdonk, 1 Broadway, New York, $169,763.

SCOWS.—San Juan, Porto Rico.—Lieut. Sam'l G. Jones, U. S. Engineer Officer in charge of Harbor-Works, wishes to correspond with manufacturers of self-dumping scows. The scows are to be of light draft, wood, copper sheathed preferred. They are to be used for receiving material alongside endless chain elevator type of dredge. The materials to be excavated are sand, soft mud, compact clay, and about 5% dead coral heads. About six scows are needed. Immediate delivery of larger sizes would be required at San Juan, and of smaller sizes at Pier 22, Brooklyn, N. Y.

CONTRACT PRICES.

STREET SPRINKLING.—Indianapolis, Ind.—The following contracts were let May 24, 1899, for street sprinkling: Geo. W. McCray & Co., Dist. No. 1, for each 10,000 sq. ft., $24; Henry T. Nolting, Dist. No. 2, $25.80; No. 3, $26.95; No. 6, $29.30; Fred Goepper, No. 7, $28.80; Frank Kennington, Nos. 8 and 10, $24.90 and $26.50; Fred W. Fuehring, No. 9, $26; Rust & Roepke, Nos. 11 and 12, $26.50 each; F. W. Nolting, No. 14, $25.70; No. 16, $29.60; John R. Kennington, No. 15, $28.95.

ELECTRIC LIGHTING.—Newark, N.Y.—The New Light, Heat & Power Co. has secured the contract at $19.95 a 2,000-c. p. light a year for five years. There will be 15 arc lamps to be lighted from dusk to sunrise. The construction of the plant is about completed.

PARK WORK.—New York, N. Y.—The following bids were received June 2 by the department of parks for work in the Botanical Garden, Bronx Park:

Bids Received at New York, N. Y., June 2, 1899, for Work in the Botanical Garden, Bronx Park.

Bidder.	Excavation—Earth, 5,200 cu.yds.	Excavation—Rock, 100 cu.yds.	Filling, frnshd, etc., 9,000 cu.yds.	Cross-walks,* 13,000 sq. ft.	Surface basins, complete, 13, each.	Vitrified stoneware drain pipe laid—8-in., 750 lin. ft.	12-in., 260 lin. ft.	18-in., 930 lin. ft.	Telford macadam pavem't, 3,000 sq. yds.
John B. Devlin	$0.33	$1.00	$0.25	$0.11	$30.00	$0.25	$0.43	$0.95	$0.84
Charles L. Doran	.35	2.00	.40	.07	55.00	.50	.60	2.00	.80
William J. Moore	.50	1.00	.30	.15	50.00	1.00	1.50	2.00	1.25
S. M. De Pasquale	.29	1.25	.60	.13	40.00	.56	.77	1.95	1.27
Wm. H. Masterson	.35	1.50	.35	.07	35.00	.35	.50	1.50	1.15
John C. Rodgers, Jr.	.30	1.50	.30	.80	10.00	1.25	1.50	2.00	1.25
D. W. Hemming	.35	.01	.55	.33	30.00	.46	.60	2.20	1.00
Thielman & Smith	.25	1.00	.45	.09	35.00	.60	.80	1.50	1.10
A. E. Olmsted	.30	2.00	.55	.10	60.00	.60	.80	3.50	1.35

*With trap rock screenings, including rubble stone foundation.

MOVABLE DAM.—Louisville, Ky.—Capt. Geo. A. Zinn, U. S. Engr., writes us that the Chas. Hegewald Co., New Albany, Ind., submitted the only bid May 29, 1899, for constructing a movable dam at 5.79 cts. a lb. for iron and steel work, 127,208 lbs., and at $4.99 each for wickets complete, there being 310; total, $8,916.

WATER-WORKS.—North Braddock, Pa.—We are informed that the following bids were received June 1, for furnishing the materials and for constructing works, as advertised in Engineering News; Samuel A. Taylor, Borough Engr., 339 Fifth Ave., Pittsburg, Pa.: Cast-iron pipe, 1,374 tons, and special castings, 38,000 lbs.—U. S. Cast-Iron Pipe & Foundry Co., $24.20 a ton, and 2½ cts. a lb., respectively; R. D. Wood & Co., $24.70 and 2½ cts., respectively. Hydrants, valves, etc.:

Bids Received at North Braddock, Pa., June 1, 1899, for Hydrants, Valves, Pipe-Laying, Etc.

Hydrants, Valves, Eetc.

Bidder.	Hydrants—Two-nozzle, 50, each.	Hydrants—Three-nozzle, 22, each.	Valves—14-in., 2, each.	Valves—8-in., 35, each.	Valves—6-in., 51, each.	Valves—4-in., 18, each.	Valve Boxes, 106, each.
Kennedy Valve Co.	$21.00	$22.50	$29.00	$14.50	$9.90	$5.90	$3.00
Michigan Brass & Iron Co.	21.65	24.75	45.00	16.00	9.50	6.00	2.50
Williamsport Valve & Hydrant Co.	21.30	33.35	42.53	15.08	10.71	6.34	2.85
Eddy Valve Co.	22.50	25.00	48.00	17.00	11.25	6.25	2.85
Chapman Valve Co.	18.21	21.90	37.47	15.00	9.13	6.31	....
Bourbon Brass Co.	17.00	20.50	45.00	13.00	9.00	5.40	2.00
Ludlow Valve Mfg. Co.	21.50	21.50	47.50	16.35	10.90	6.60	2.85
H. W. Chisshalm	21.50	24.55	42.53	15.08	10.21	6.34	2.65
R. D. Wood & Co.	23.00	25.00	55.00	16.00	11.00	6.75	2.85
Rensselaer Mfg. Co.	22.50	28.50	48.00	17.00	11.80	7.40	2.40

Pipe-Laying.

Bidder.	Pipe—14-in., 2,800 lin. ft.	Pipe—8-in., 19,850 lin. ft.	Pipe—6-in., 33,200 lin. ft.	Pipe—4-in., 10,000 lin. ft.	Depth—Over 4 ft.	Depth—Under 4 ft.	Rock, a cu. yd.	Total.
Cona Accetta & Co.	$0.45	$0.32	$0.29	$0.28	$0.07	$0.04	$1.75	$20,040
Eugene Scanlon	.55	.39	.35	.29	.05	.05	2.00	23,802
John Dell	.34	.28	.25	.22	.05	.02	1.75	17,010
J. H. McQuade	.53	.34	.31½	.29	.09	.02	....	21,081
Keeling & Ridge	.95	.45	.35	.30	.05	.05	....	26,213
Ott Bros.	.50	.32	.27	.22	.03½	.02	....	22,236
N. M. Spaeth,	.55	.43	.39	.35	.05	.04	1.50	26,523
Cronin & O'Herron	.34	.24	.21	.20	.07	.02	....	14,688
Chandley Bros. & Co.	.35	.25	.22	.18	.05	....	....	15,047
Rossier & Castoe	.41	.22	.18½	.15½	.03½	.01½	1.90	13,207
Wagner Water Supply Co.	.37	.20½	.17½	.13½	.02½	.01½	2.00	12,265
H. W. Chisshalm	.36	.24	.20	.18	.03	.02	....	17,381

PIER WORK.—Kenosha, Wis.—Capt. J. G. Warren, U.S. Engr., Milwaukee, Wis., received the following bids May 25 for constructing a pile pier, crib pier, and breakwater, removing cribs and dredging at the harbor at Kenosha, as advertised in Engineering News:

DREDGING.—Ship Island Pass, Miss.—The National Dredging Co., Wilmington, Del., and the Rittenhouse-Moore Dredging Co., Mobile, Ala., submitted the only bids for dredging Ship Island Pass, at 22½ cts. and 24 cts. a cu. yd., measured in scow.

Bids Received at Kenosha, Wis., May 25, 1899, for Pier Work.

Quantities.		James Cope & Sons, Racine.	Hausler & Lutz T. & D. Co., Chicago.	Robt. B. Rice, Muskegon.	Lydon & Drews, Co., Chicago.	E. Gillen, Racine.	Sam'l O. Dixon, Milwaukee.	P. W. Galloway, Racine.	Andrew H. Green, Chicago.
Pile Pier: Round piles,	36,422 lin. ft.	$0.17	$0.22	.....	$0.21	$0.24	$0.18	$0.21	$0.205
Wakefield sheet piling*	132,900 ft. B.M.	27.50	35.00	.....	32.00	32.50	30.00	28.25	34.00
Pine decking plank	21,792 " "	20.00	24.00	.....	21,00	18.50	20.00	19.75	24.77
White oak timber	64,384 " "	39.00	45.00	.....	48.00	55.00	42.00	39.75	45.50
Pine timber	34,776 " "	27.00	29.00	.....	30.00	40.00	27.00	24.75	32.25
Stone	700 cords...	6.00	8.00	.....	6.50	7.00	6.00	5.90	8.40
Wrt. iron screw,bolts & tie rods	30,477 lbs.....	.04	.04	.....	.04	.04	.04	.03	.025
Spikes	2,500 "	.04	.04	.....	.04	.04	.04	.03	.03
Crib pier, extension and breakwater:									
White pine timber per M.	1,500,000 ft. B. M.	...	29.00	$22.50	28.00	25.50	27.00	...	...
Douglas or Oregon fir		...	30.00	.....	50.00	31.00	...	...	...
Long-leaf yellow or So. pine		...	29.00	.....	30.00	28.50	...	...	...
Norway pine timber		...	28.00	21.50	28.00	25.50	...	...	...
Hemlock timber	788,000 ft. B.M.	...	19.00	16.50	21.00	18.75	20.00	...	...
Pine plank	38,000 " "	...	24.00	17.00	21.00	18.00	20.00	...	...
Stone	7,000 cords...	...	7.50	5.65	6.00	6.00	6.25	...	...
Foundation & protection piles	258 each...	...	9.00	10.00	10.00	10.50	12.00	...	...
Wrought iron drift bolts	146,000 lbs.....	...	.035	.03	.03	.03	.03	...	...
Wrought iron screw bolts	8,000 "	...	.04	.03	.04	.04	.05	...	...
Wrought iron spikes	7,000 "	...	.04	.03	.04	.04	.05	...	...
Removing old pier:									
Removing old North pier	1,500 ft.....	...	14,250	...	14,000	...	9,750	...	21,000
Removing & placing stone	1,500 cords...	...	4.00	...	4.25	...	3.50	...	4.75
Moving 3 cribs, end North pier to new North pier.		...	9,000	...	8,000	...	7,000	...	...
Dredging	360,000 cu. yds.	...	.11	...	.105	...	.069	...	.139
Totals		$19,251	$24,012[1]	$85,696	$22,362[2]	$24,615[1]	$20,141[1]	$20,373	$23,293[1]
		.....	108,751[3]	.....	98,126[3]	93,581[3]	98,601[3]	.....	28,125[3]
		.....	20,250[4]	.....	20,375[4]	.....	15,000[4]	.....	50,040[4]
		.....	9,000[5]	.....	8,000[5]	.....	7,000[5]	.....	.....
		.....	39,600[5]	.....	37,800[5]	.....	24,840[5]	.....	.....

[1]Total for 926 lin. ft. pile pier; [2]500 ft. pier extension and 600 lin. ft. breakwater; [3]removal of 1,500 ft. of old pier; [4]taking up and replacing 3 cribs; [5]dredging 360,000 cu. yds. *Norway pine plank.

INDUSTRIAL NOTES.

THE PREMIER STEEL CO.'S plant and property in Indianapolis, Ind., will be sold at receiver's sale, 2 p. m., June 10. Jno. E. McGettigan, Receiver.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., has the contract for a new foundry and also for a one-story building for the Wheeler & Wilson Mfg. Co.

HARRISON BROS. & CO., INC., Philadelphia, Pa., announces that it is manufacturing the antoxide paint, which will stand great changes of temperature and is entirely unaffected by heat up to 300 degrees.

THE KENNEY CO., 72-74 Trinity Place, New York, manufacturers of the Kenney Flushometer for water closets, urinals, etc., announces that its appliances are used on the new passenger steamer "Pennsylvania" for service between Erie and Buffalo, N. Y.

THE ILLINOIS MFG. CO., Macomb, Ill., successors to Frost Sewer Pipe Co., is in the market for supplies of all kinds used in connection with developing a sewer pipe and clay goods manufacture, and it would like to receive catalogues and quotations from firms in that business.

THE BULLOCK ELECTRIC MFG. CO., Cincinnati, O., announces that its new factory, with treble the capacity of its former works, and with new tools being added, has been taxed to its utmost to supply promptly the machines called for by its sales department. New machinery, however, will soon be installed, which will obviate the difficulty.

THE WELLS LIGHT MFG. CO., 44 and 46 Washington St., New York, has sold 1,500 Wells lights to the Russian government for use upon its railways. Mr. Edward Robinson, Proprietor of the Wells light, returned from Europe on the Cunard steamer "Umbria" a few days ago, it being partly in the interest of the business and partly for pleasure.

GRAY, DAVIS & SAX and DAVIS & SAX, Philadelphia, Pa., have been dissolved by mutual consent by the retirement of Mr. John H. Gray and Mr. Chas. H. Davis. All debts of the said firms, so far as relates to the Philadelphia office, will be paid by Mr. Percival M. Sax, and claims due to either of said firms are to be paid to him. Mr. Percival M. Sax and Mr. Fred. W. Abbott have associated themselves in the civil engineering and contracting business, with offices at 1326 Chestnut St., Philadelphia.

THE NATIONAL PNEUMATIC TOOL CO., Philadelphia, has purchased from the American Pneumatic Tool Co., New York, the right to manufacture pneumatic tools for use in the metal trades. The National Pneumatic Tool Co. pays a considerable sum for this right, which is to be exclusive except as regards the American Pneumatic Tool Co., which will continue to make and sell pneumatic tools for all purposes as heretofore. It is stated that this right was purchased by the National company upon advice of its counsel.

THE NATIONAL STATION REGISTER CO., Mt. Vernon, O., has just placed upon the market a station register for displaying the names of stations in railway cars. The station names are printed on cloth which is wound upon two parallel rollers, mounted in a case. The register is not automatic but is operated by the trainman at the same time that he announces the station name; a single pull upon a cord changes the name displayed and also rings a bell calling the attention of passengers to the announcement. Mr. F. W. Jones is the President and General Manager of the company, and Mr. Chas. E. Cole is its Vice-President.

THE HAZELTON BOILER CO., New York, reports its sales for last year to exceed those of the previous year about 75%, with a steadily increasing demand all over the country and abroad. The company has on its list of recent sales such concerns as the Goodyear's India Rubber Glove Co., Naugatuck, Conn.; North Adams Gas Light Co., North Adams, Mass.; the S. O. & C. Co., Ansonia, Conn.; Lestershire Mfg. Co., Boston, Mass., and Lestershire, N. Y.; John Royle & Sons, Paterson, N. J.; the N. Y. Mutual Gas Light Co., and the American Sugar Co., Molokai, Hawaiian Islands. All of the above boilers are of large size and will have brick-lined steel jackets, which is the new and popular style of setting for this boiler, and the subject of patents owned by its first makers.

THE CHISHOLM & MOORE MFG. CO., Lake and Kirtland Sts., Cleveland, O., manufacturer of chain hoists, cranes, etc., has purchased the new plant in course of erection for the Garry Iron & Steel Roofing Co., Cleveland, on Lake St., between Kirtland and Coe Sts., and adjoining the present property of the former company. The entire property has a frontage on Lake St. of 501 ft. and extends back 330 ft. to a switch of the Pennsylvania R. R. The main building, which is 100 × 318 ft., will be used for a malleable iron foundry, and a building, 60 × 190 ft., adjoining it will be used by the annealing and shipping departments. The new buildings have been made necessary by the fact that the company has purchased the business of the American Rail Joint Mfg. Co., Cleveland. The Garry Iron & Steel Roofing Co. will erect another building for its own use.

NEW COMPANIES.—Merritt Electric Air Brake Co., Jersey City, N. J.; $1,000,000; Walter W. Bostwick, Monroe P. Wilkins, D. H. Merritt, F. W. Merritt, W. G. Morse, all of New York.

Euring-Essick Engine Co., Jersey City, N. J.; $5,000,000; Justin E. Euring, Samuel V. Essick, Monroe P. Wilkins, C. A. Hagen, Waldo G. Morse, all of New York city.

Olds Motor Works, Detroit, Mich.; $500,000, beginning with $200,000; machinery, engines, etc.; E. W. Sparran, Lansing, Mich; J. H. Seager, Hancock, Mich.; R. E. Olds, Lansing; S. L. Smith, F. L. Smith, both of Detroit.

Mail Delivery Notice.

Special efforts are made to deliver our paper to its readers each week at the earliest possible moment. The largest binding and mailing establishment in New York begins work on Engineering News early each Wednesday evening, and all papers for Boston, Philadelphia and Washington are usually in the New York post-office by midnight; all Brooklyn and New York city papers by 3 o'clock—in ample time for the first delivery Thursday morning. The entire edition, including foreign copies, is in the mail soon after 6 o'clock Thursday morning. If your paper is not received promptly we advise that you make a complaint to your local post-office officials.

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